

Stock code:002902

mentech

Automotive Magnetics Catalog

TO DO THE UTMOST FOR CUSTOMERS

Index	02
cross-check	03
BMS Transformer	07
Lan Transformer	27
CHIP COMMON MODE CHOKE	44
Power Transformer	46
COMMON MODE CHOKE	51

BMS Transformer

NO.	Mentech	Pulse	Bourns	Packaging	Topology	Channels	Pin No.	PIN pitch	Array pitch
1	TD1011G	HM2100NL		14.7*11.65*3.45	TR+CMC	2	10P	2.54mm	14.93
2	TB1015G	HM2101NL		7.6*6.75*5.25mm	TR+CMC	1	6	2.54mm	9.45mm
3	TE1011G	HM2102NL/HMU2102NL	SM91501AL/SM91501ALo	14.8*11.7*4.85mm	TR+CMC	2	12P	2.0mm	14.7mm
4	TB1013G	HM2103NL/HMU2103NL	/	7.6*6.75*5.25mm	TR+CMC	1	6P	2.54mm	9.45mm
5	TB1121G	HM2106NL	/	8.50*13.31*5.75mm	TR	1	6P	2.54mm	16.85mm
6	TB1016G	HM2108NL	/	8.50*13.31*5.75mm	TR	1	6P	2.54mm	16.85mm
7	TE1012G	HM2112ZNL	/	14.8*12.15*3.45	TR+CMC	2	12P	2.0mm	15.45
8	TB101FG	HM2113ZNL	/	9.0*12.15*3.45	TR+CMC	1	6P	2.54	15.45
9	TB1023G	HM1236NL	/	8.38*7.69*4.25mm	CMC+TR	1	6P	2.54&3.81mm	10.5mm
10	TB1022G	HM1238NL	/	8.38*7.69*4.25mm	CMC+TR	1	6P	2.54&3.81mm	10.5mm
11	TB101CG	/	SM91502AL/SM91502ALA	7.6*6.75*5.25mm	TR+CMC	1	6P	2.54mm	9.45mm
12	TB1024G	/	SM91508AL	8.38*7.69*4.25mm	CMC+TR	1	6P	2.54&3.81mm	10.5mm
13	TE1091G	/	SM91509AL	14.8*11.7*4.85mm	CMC+TR+CMC	2	12P	2.0mm	14.7mm
14	TB2013G	/	SM91514AL/SM91514ALN	7.6*6.75*5.25mm	TR+CMC	1	6P	2.54mm	9.45mm
15	TB1012G	/	/	12.8*14.3*9.0mm	TR+CMC	1	6P	2.54mm	18mm
16	TB101EG	/	/	7.6*6.75*4.5mm	TR+CMC	1	6P	2.54mm	9.45mm
17	TA1121G	/	/	7.25*9.55*3.5mm	TR	1	4P	5.08mm	12.80mm
18	TB101DG	/	/	7.3*8*4.05mm	TR+CMC	1	6P	2.54mm	10.0mm
19	TB101GG	HX1335HL	/	24.32*12.0*6.0mm	TR+CMC	1	6P	2.54mm	27.85mm
20	TB1017G	/	/	7.6*6.75*5.25mm	TR+CMC	1	6P	2.54mm	9.45mm

LAN Transformer

NO.	Mentech	Pulse	Bourns	Sumida	Packaging	Topology	Transfer Speed	Port	Pin No.	PIN pitch	Array pitch
1	GJ1011G	HM5004NLT	/	/	17.5*12.2*6.2mm	TR+CMC	1G	1	24P	1.27mm	16.0mm
2	GJ1021G	HM5149NLT	/	/	17.78*9.91*3.2mm	CMC+TR	1G	1	24P	1.27mm	10.41mm
3	HB1013G	HMU1228NL	/	/	8.89*10.0*6.85mm	TR	100M	1	6P	2.54mm	12.7mm
4	HE1011G	HM0068ANL	/	/	12.7*8.81*2.1mm	TR+CMC	100M	1	12P	1.27mm	9.45mm
5	HF1011G	HM1188NL	SM91071AL	CLP0612	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
6	HF1014G	HM1190NL/HM1193NL	/	/	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
7	HF1015G	HM1225NL	/	/	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
8	HN1011G	HM1234NL	/	/	28.1*12.0*6.4mm	TR+CMC	100M	4	40P	1.27mm	16.0mm
9	HH1011G	HM1331NL	/	/	15.24*12.7*7.62mm	TR+CMC	100M	1	20P	1.27mm	15.24mm
10	HF1021G	/	PT61018AAPEL	/	12.8*6.9*5.65mm	CMC+TR	100M	1	16P	1.27mm	9.45mm
11	HF1022G	/	SM91072AL/SM91073AL	/	12.7*7.10*6.40mm	CMC+TR	100M	1	16P	1.27mm	9.45mm
13	HE1012G	HM2104ZNL	/	/	14.81*11.7*4.88mm	TR+CMC	100M	1	12P	2.0mm	14.7mm
15	HB1012G	/	/	/	7.6*6.75*5.25mm	TR+CMC	100M	1	6P	2.54mm	9.45mm
16	HF1013G	/	/	/	12.7*7.10*5.25mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
17	H1601CA	/	/	/	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
18	HF1016G	HM1237NL	/	/	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm
19	HF1017G	SM91074AL	/	/	12.7*7.10*6.40mm	TR+CMC	100M	1	16P	1.27mm	9.45mm

CM4532 SERIES

NO.	Mentech	TDK	COMMON MODE Impedance ($\Omega @ 10M \pm 25\%$)	COMMON MODE Inductance ($\mu H + 50\%/30\%$)	DCR (Ω max)	Rated Current (mA max)	Rated Volt (Vdc max)	IR (Ω min)
1	CM4532-110-A	ACT45B-110-2P-TL-000	700	11	0.6	250	50	10M
2	CM4532-220-A	ACT45B-220-2P-TL-000	1000	22	1.0	200	50	10M
3	CM4532-510-A	ACT45B-510-2P-TL-000	2000	51	1.2	200	50	10M
4	CM4532-101-A	ACT45B-101-2P-TL-000	5000	100	3.2	150	50	10M
5	CM4532-201-A	ACT45B-201-2P-TL-000	15000	200	4.5	100	50	10M

POWER TRANSFORMER

NO.	Mentech	Turn ratio(±3%)	Packaging	OCL (uH)	Pin No.	PIN pitch	Array pitch
1	TTAER09-2079SG	NP: Ns1: Ns2 17:19:5	10*10.8*5.5mm	230 Min	7P	2.0mm	9.5mm
2	TTAER09-2114SG	NP: Ns1: Ns2 17:12:5	10*10.8*5.5mm	230 Min	7P	2.0mm	9.5mm
3	TTAER09-2368SG	NP: NS 17:26	10*10.8*5.5mm	230 Min	7P	2.0mm	9.5mm
4	TTAER09-2369SG	NP: NS 17:19	10*10.8*5.5mm	230 Min	7P	2.0mm	9.5mm
5	TTER09-1142SG	4-3: 2-1: 8-7: 6-5 8: 8: 12: 12	10*12.07*6.0mm	45.6 min	8P	2.0mm	10.1mm
6	TTAEFD14-1857SG	NP: NS1: NS2: NS3: NS4 17: 18: 5: 18: 5	13.5*18.8*6.6mm	150Min	8P	2.0mm	16.8mm
7	TTAEPC13-2085SG	NP: NS1: NS2: NS3: NS4 17: 18: 3: 18: 3	13.5*18.8*6.6mm	150Min	8P	2.0mm	16.8mm
8	TTAEPC13-2136SG	NP: NS1: NS2: NS3: NS4 13: 18: 5: 18: 5	13.5*18.8*6.6mm	100Min	8P	2.0mm	16.8mm
9	TTAEPC13-2058SG	NP: NS1: NS2: NS3: NS4 12: 22: 6: 22: 6	13.5*18.8*6.6mm	100Min	8P	2.0mm	16.8mm
10	TTAEPC13-2074SG	NP: NS1: NS2: NS3: NS4 17: 20: 9: 20: 9	13.5*18.8*6.6mm	150Min	8P	2.0mm	16.8mm
11	TTAEPC13-2183SG	NP: NS1: NS2: NS3: NS4 13: 16: 5: 16: 5	13.5*18.8*6.6mm	100Min	8P	2.0mm	16.8mm
12	TTAEFD14-1411SG	N1: N2: N3: N4 1: 1: 0.6818: 0.6818	14.5*17.5*8.5mm	300 Min	9P	2.8mm	14.47mm
13	TTAEFD14-1673SG	N1: N2: N3: N4 1: 2.333: 2.333: 0.5556	14.5*17.5*8.5mm	13±12.5%	9P	2.8mm	14.47mm
14	TTAEFD14-1779SG	N1: N2: N3: N4 1: 3: 3: 1.667	14.5*17.5*8.5mm	15±10%	9P	2.8mm	14.47mm
15	TTAEFD14-1780SG	N1: N2: N3: N4 1: 3: 3: 1.667	14.5*17.5*8.5mm	10±12.5%	9P	2.8mm	14.47mm
16	TTAEFD14-2128SG	N1: N2: N3: N4 1: 3.75: 3.75: 1.75	14.5*17.5*8.5mm	7±12.5%	9P	2.8mm	14.47mm
17	TTAEFD14-2213SG	N1: N2: N3: N4 1: 3: 3: 1.667	14.5*17.5*8.5mm	15±12.5%	9P	2.8mm	14.47mm

COMMON MODE CHOKE

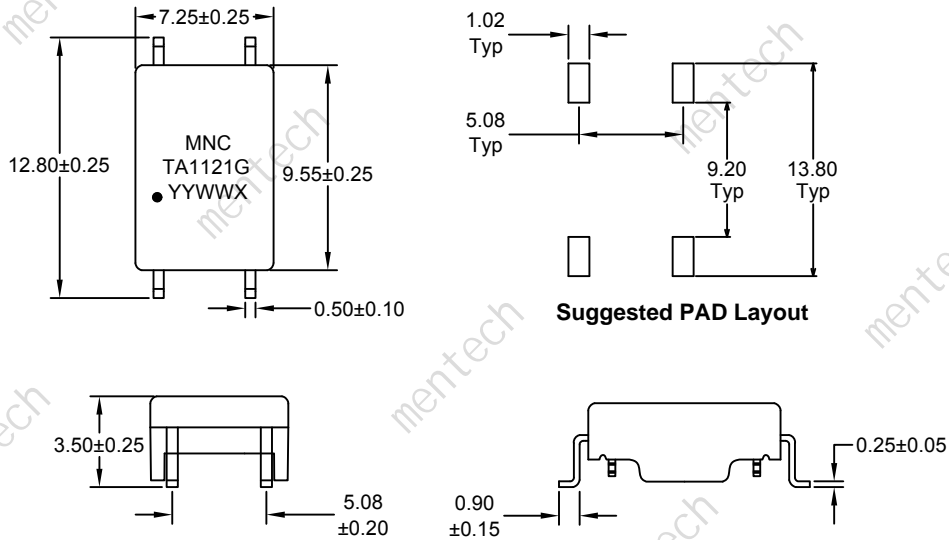
NO.	Mentech	OLC	Rated Current	Packaging(mm)	Pin No.	PIN pitch(mm)	项目状态
1	CMA0402SG131U	125 μ H MIN		9.14*5.2*3.5	4P	0.50	进行中
2	CMA0603-561U	3.05 μ H MIN		8.0*8.0*7.8	4P	0.45	进行中
3	CMA0903SG112N	1.17mH \pm 35%	1.22A MAX	12.7*12.7*5.46	4P	1.6*0.6	进行中
4	CMA1807DG102M	800 μ H MIN	15A MAX	32*25*15	4P	1.20	进行中
5	CMA953SG801N	800 \pm 35%		13*13*8.6	4P	0.60	进行中
6	CMA1407SG300U	30 μ H MIN		30.8*27.12*25.05	4P	0.80	进行中
7	CMA1409DG400N	39.7 μ H \pm 50%/-30%		24*20*2	4P	2.10	进行中
8	CMA1608DG102U	20mH \pm 50%/-30%		22.5*20*19.5	4P	1.20	进行中
9	CMA1712DG102U	1mH MIN (1.5mH \pm 30%)	16A MAX	23.5*18.5*28	4P	1.50	进行中
10	CMA1810DG281N	280 μ H \pm 30%/-20%		19*18*30.8	4P	1.40	进行中
11	CMA1811DG551V	550 μ H \pm 25%		23*20*32.2	4P	1.60	进行中
12	CMA1817DG851V	850 μ H \pm 25%		26.5*23*32.2	4P	1.60	进行中
13	CMA2110DG202N	2.0mH \pm 30%		29.5*20*32	4P	1.5*3.0	进行中
14	CMA2110DG242U	2.4mH MIN(10KHz) 1.7mH-35%/+45%(100KHz)		33.6*31.3*52.8	4P	1.40	进行中
15	CMA2208DG501N	379 μ H -35+50%	16A	29*31*16	4P	1.50	进行中
16	CMA2208DG581N	583.2 μ H \pm 50%/-35%		34.5*30*16.5	4P	1.50	进行中
17	CMA2208DG701U			27*13*28.8	4P	1.50	进行中
18	CMA2210DG761N	0.76mH \pm 35%		30.5*29.5*17	4P	1.70	进行中
19	CMA2510DG102U	1.0mH MIN		26.5*30*20	4P	1.40	进行中
20	CMA2510DG201N	200 μ H \pm 30 %		36*28*34	4P	1.80	进行中
21	CMA2510DG221U	220 μ H MIN		32*26.5*21	4P	2.00	进行中
22	CMA2510DG281U	280 μ H MIN		31.5*26.5*21	4P	1.80	进行中
23	CMA2513DG331UA	330 μ H MIN		34.6*34.6*56.3	4P	1.80	进行中
24	CMA2513DG601U	600 μ H MIN		36.6*33*23	4P	1.60	进行中
25	CMA2521DG121U	122 μ H MIN		25.5*27.5*21.5	4P	2.00	进行中
26	CMA2521DG221U	220 μ H MIN		28*26*16	4P	1.40	进行中
27	CMA2610DG302N	3.0mH \pm 50%/-30%	20A MAX	36.6*36.5*21.8	4P	1.60	进行中
28	CMA2610DG302NA	3.0mH \pm 50%/-30%	20A MAX	37.1*36.5*21.8	4P	1.60	进行中
29	CMA2610DG401U	400(589.6T _{yp})		35.5*31.5*24	4P	3.60	进行中
30	CMA2610DG802U	8.0mH MIN		36.5*21.8*36.6	4P	1.60	进行中
31	CMA2610DG802UA	8.0mH MIN 1.3mH \pm 35%	20A MAX	36*36*27	4P	1.60	进行中
32	CMA2813DG172U	1.7mH MIN		32.5*33.5*52.5	4P	1.10	进行中
33	CMA2813DG231N	232 μ H \pm 35%		37.5*37.5*25.5	4P	2.1*4.0	进行中
34	CMA2911DG202U	2.0mH MIN		36*36*21	4P	2.00	进行中
35	CMA3010DG102U	1.0mH MIN (10KHz) 0.7mH MIN (100KHz)		39.5*42.75*43.79	4P	2.00	进行中
36	CMA3010DG481U	480 μ H MIN		40*25*42.5	4P	6.5*3.2	进行中
37	CMA3010DG522N	5.2mH TYP(10KHz) 1.5mH TYP.(100KHz)		41*41*25	4P	2.00	进行中
38	CMA3010DG751U	750 μ H MIN		22*41*38.8	4P	1.6*3.2	进行中
39	CMA3012DG751U-8TS	750 μ H MIN		22*41*38.8	4P	1.6*3.2	进行中
40	CMA3015DG343N	33.85mH \pm 30%		38.5*38.5*48	4P	1.65	进行中
41	CMA3015DG652N	6.5mH \pm 30%		36.5*38*23.5	4P	2.00	进行中
42	CMA3015DG652NA	6.5mH \pm 30%		38*32*29	4P	2.00	进行中
43	CMA3208DG122UA	3.5mH-35%/+45% (10KHz) 1.2mH MIN(100KHz)		42.6*45.6*48.8	4P	1.70	进行中
44	CMA3310DG701U	700 μ H MIN		43.5*23*46.3	4P	2.2/3.0	进行中
45	CMA3312DG143N	14mH \pm 30%		48*28*45	4P	2.00	进行中
46	CMA3312DG802U	8mH MIN(11mH \pm 25%)	35A MAX	42*25*45.3	4P	1.6*3.2	进行中
47	CMA4015DG122U	1.2mH MIN		49*29.5*51.3	8P	1.5/2.0	进行中
48	CMA4015DG212U	2.1mH MIN		48.5*29.5*51.3	8P	1.3/1.8/2.5	进行中
49	CMA4015DG272U	2.7mH MIN		48.5*29.5*51.3	8P	1.3/1.8	进行中
50	CMA4015DG901N	900 \pm 50%/-30%		53*52*37	4P	8*2	进行中
51	CMA422SG102U	700 μ H MIN		5.35*8.8*5.9	4P	0.60	进行中
52	CMA4715DG112N	1.16mH \pm 30%		60*60*30.5	4P	1.7*3.4	进行中
53	CMA4715DG162NA	1.67mH \pm 30%		60*60*30.5	8P	1.2/2.0	进行中
54	CMA5015DG502U	5.0mH MIN		70.5*70.5*36.5	8P	2.7/2.1	进行中
55	CMA5519DG452U	4500 μ H MIN		60*60*30	4P	1.7*3.4	进行中
56	CMA5Q15DG203U	20mH MIN		22.5*12.5*21	4P	0.70	进行中
57	CMEE11DG153U	15.6mH MIN		15.75*8.71*16.3	4P	0.50	进行中
58	MGHA-0020G	3.7mH MIN		37*52	8P	1.70	进行中
59	MGHA-0021G	8.0mH \pm 30%		56	8P	2.00	进行中
60	MGHA-0022G	8.0mH \pm 30%带磁片		56	8P	2.00	进行中
61	MGHA-0108G	5.5mH \pm 30%		84.85*41.6*56.5	8P	2.00	进行中

- SMT Package contains transmit transformers.
- RoHS Compliance.
- Storage Temperature Range: -40°C TO 125°C.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.

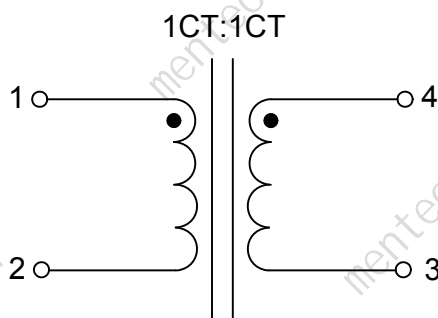


Electrical Specifications @ 25°C							
Part Number	Turns Ratio (±5%)	OCL(uH Min) 100KHz, 0.1V	LK(uH Max) 100KHz, 0.1V	DCR (mΩ Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	HI-POT
	1-2:3-4	1-2	1-2short3-4	1-2=3-4	4MHz	4MHz	1mA 2S
TA1121G	1:1	350	0.5	800	-0.5	-20	3500VAC

MECHANICAL



SCHEMATICS



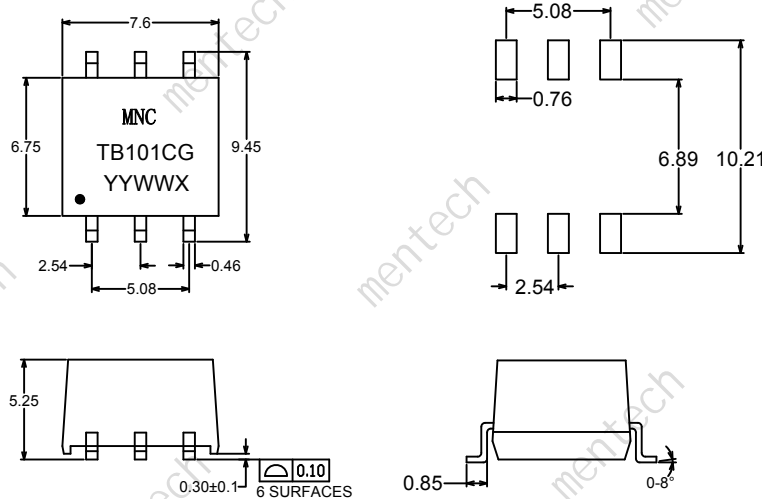
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliant.
- Operating Temperature Range: -40°C To 125°C.
- AEC-Q200 Qualified.
- Moisture Sensitivity Level: 1.
- Functional Insulation.
- 1000V For 15 Years Operation.



Electrical Specifications @ 25°C

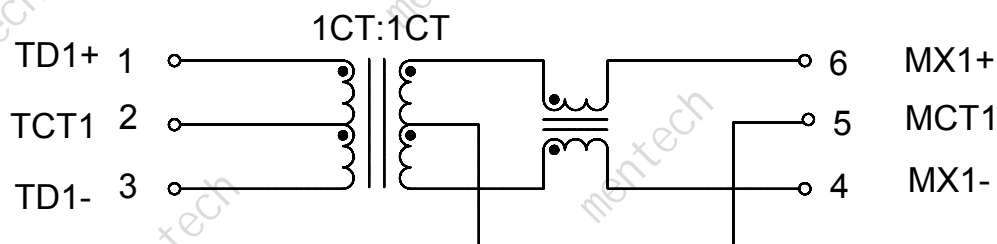
Part Number	Turns Ratio (±2%)	OCL(μH Min/Max)	LK (μH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		Cww pF max	CMRR (dB Min)		HI-POT
	(1-3):(6-4)	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	100KHz, 0.1V	1-100MHz	100-200MHz	1mA 60S
TB101CG	1 : 1	150/450	0.5	-0.25	-22	0.45	0.85	50	-35	-28	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

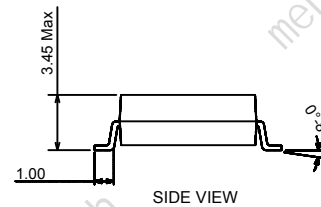
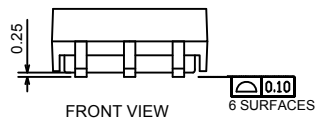
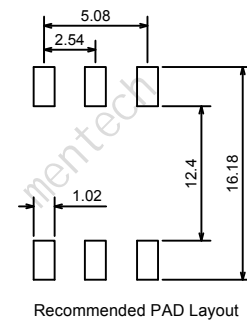
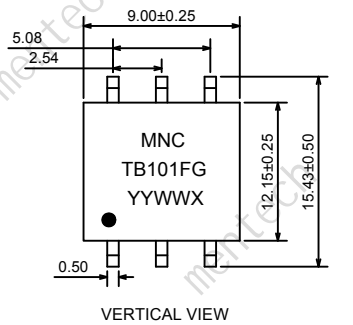


- RoHs Compliance.
- Creepage distance > 10mm.
- Storage temperature range: -50°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



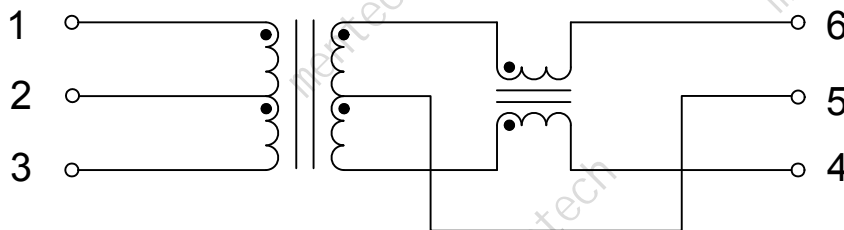
Electrical Specifications @ 25°C										
Part Number	Turns Ratio (±2%)	OCL(uH) @100KHz, 0.1V	LK(uH Max) @100KHz, 0.1V	DCR (Ω Max)		Insertion Loss (dB Max)	Return Loss (dB Min)	CMRR (dB Min)		HI-POT
		-40°C~125°C		1-3	6-4	4MHz	4MHz	1-10MHz	10-1000MHz	1mA,60s
TB101FG	1:1	150 Min,450 Max	0.50	0.45	0.85	-0.25	-20	-35	-20	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



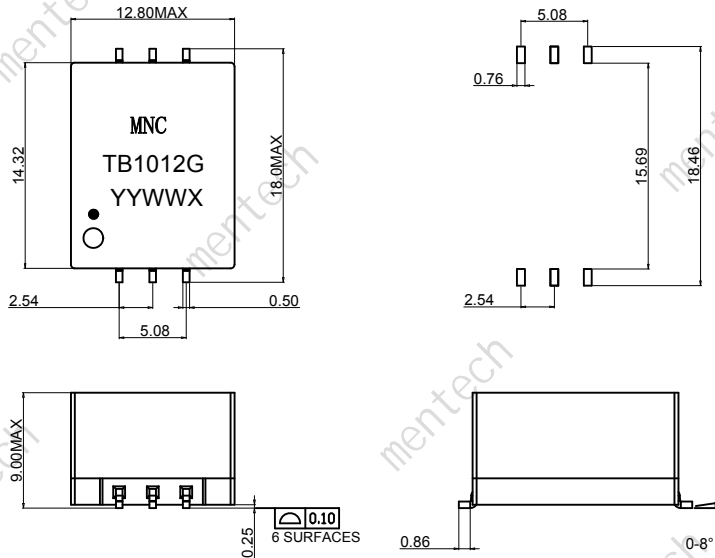
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 10mm.



Electrical Specifications @ 25°C

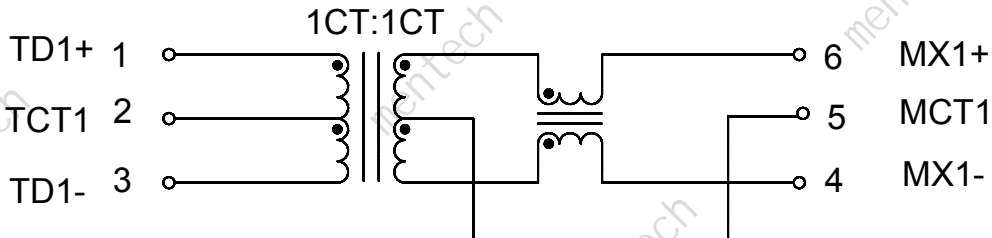
Part Number	Turns Ratio (±2%)	OCL(uH Min) @100KHz,0.1V	LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)			HI-POT
	(1-3):(6-4)	With 8mA DC Bias	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	1-10MHz	10-200MHz	200-1000MHz	1mA 60S
TB1012G	1 : 1	150	0.6	-0.25	-20	0.5	0.9	-35	-20	-10	3000VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



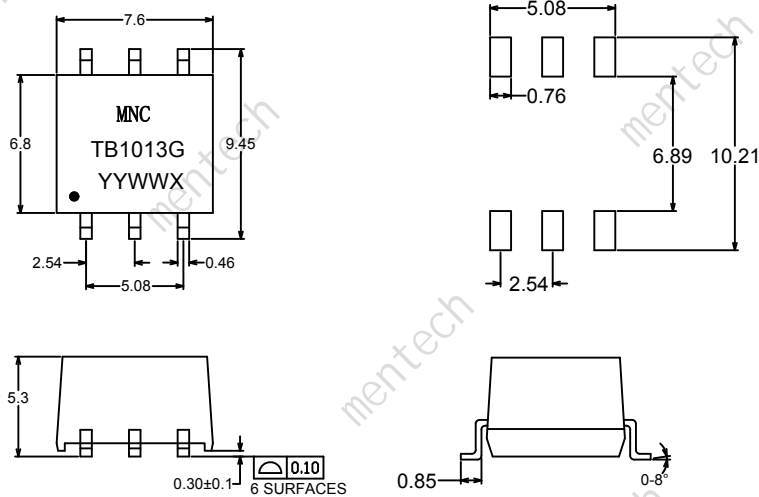
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHs Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 5mm.



Electrical Specifications @ 25°C

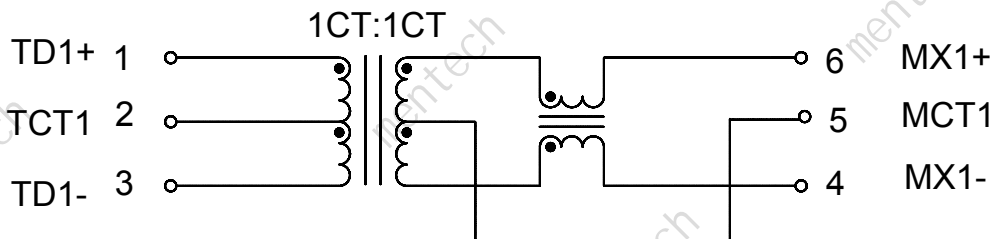
Part Number	Turns Ratio (±2%)	OCL(μH) @100KHz,0.1V		LK (μH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)		HI-POT
	(1-3):(6-4)	150 min	370 max	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	1-10MHz	10-1000MHz	1mA 60S
TB1013G	1 : 1			0.5	-0.3	-20	0.35	0.8	-35	-20	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



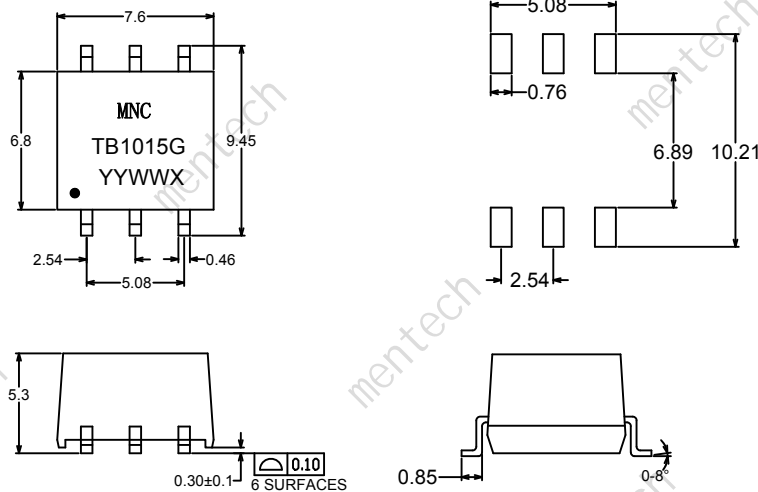
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance >5mm.



Electrical Specifications @ 25°C

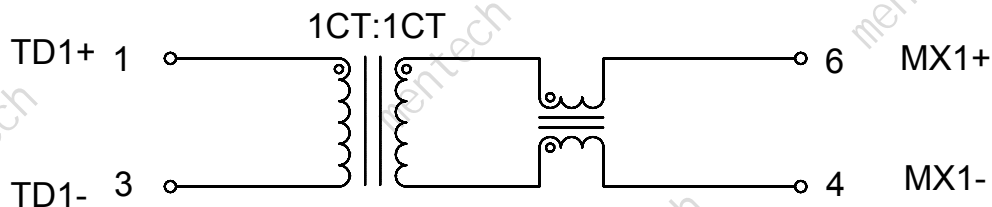
Part Number	Turns Ratio (±2%)	OCL(μH) @100KHz,0.1V		LK (μH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)		HI-POT
	(1-3):(6-4)	150 min	450 max	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	1-10MHz	10-1000MHz	1mA 60S
TB1015G	1 : 1			0.5	-0.25	-20	0.45	0.85	-35	-20	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



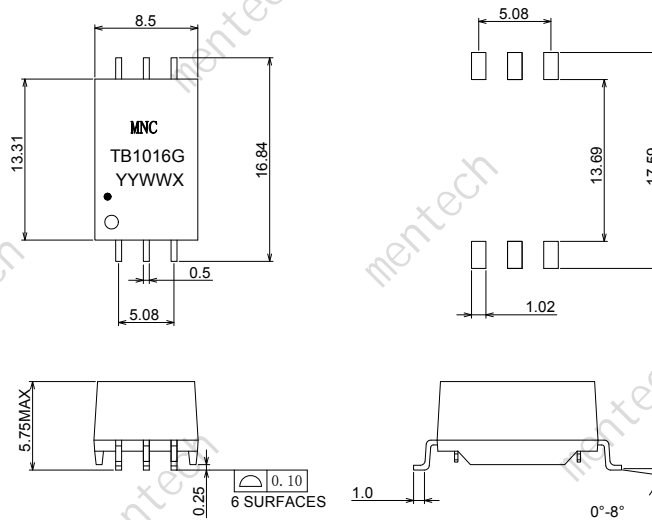
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 11mm.
- Functional Insulation
- Working Voltage: 1000V For 15 Years
- Insulation Resistance:400 MΩ MIN
- Passed EMC Measurement



Electrical Specifications @ 25°C

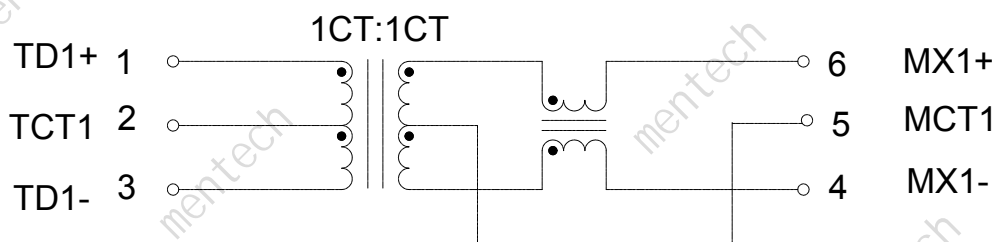
Part Number	Turns Ratio (±2%) (1-3):(6-4)	OCL(uH Min/Max) @100KHz,0.1V		LK (uH Max) 100KHz, 0.1V	Insertion Loss (dB Max) 4MHz	Return Loss (dB Min) 4MHz	CMRR (dB Min)		DCR (Ω max)@25°C		HI-POT 1mA 60S 4300VDC
		-40°C ≤ T ≤ -30°C	-30°C ≤ T ≤ 125°C				1-10MHz	10-1KMHz	1-3	4-6	
TB1016G	1 : 1	135/370	150/370	0.5	-0.35	-20	-35	0.45	0.45	0.45	

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



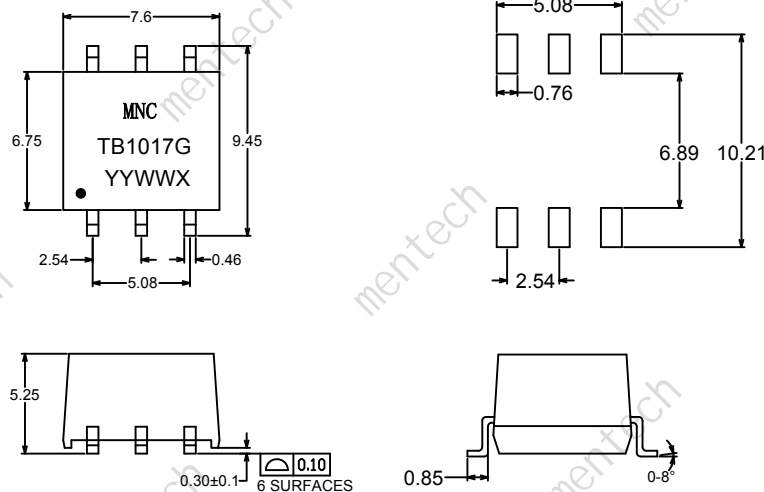
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance >5mm.
- Functional Insulation.
- 1000V For 10 Years Operation.



Electrical Specifications @ 25°C

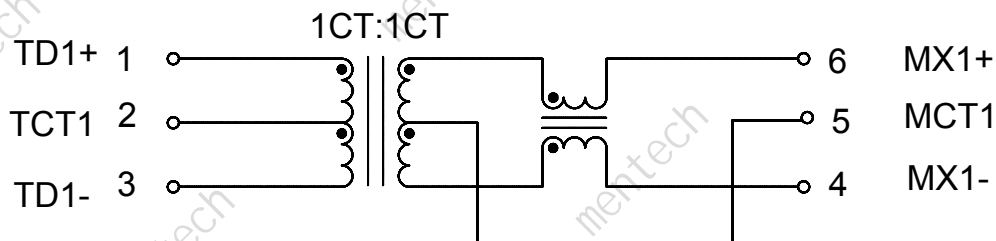
Part Number	Turns Ratio (±2%)	OCL(uH Min)	LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)			HI-POT
	(1-3):(6-4)	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	1-10MHz	10-200MHz	200-1000MHz	1mA 60S
TB1017G	1 : 1	150	0.5	-0.25	-20	0.5	0.9	-35	-20	-6	1000VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



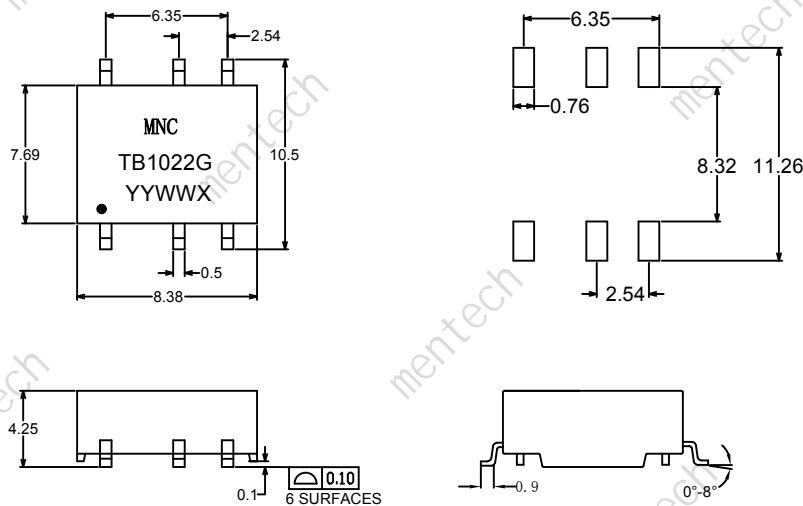
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- 1000V For 10 Years Operation.



Electrical Specifications @ 25°C

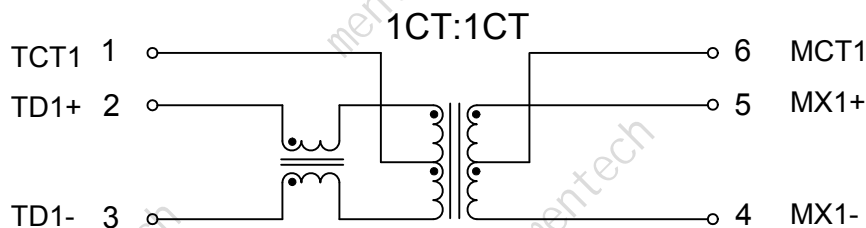
Part Number	Turns Ratio (±2%)	OCV (uH min)	DCR (Ω Max)		LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	HI-POT (Vrms)
		100KHz, 0.1V	(1-3)=(1-2)	(4-6)=(5-6)	100KHz, 0.1V, (SHORT 6-4-5)	4MHz	4MHz	1mA 60S
TB1022G	1:1	300	0.5	0.4	0.5	-0.25	-20	4300V DC

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



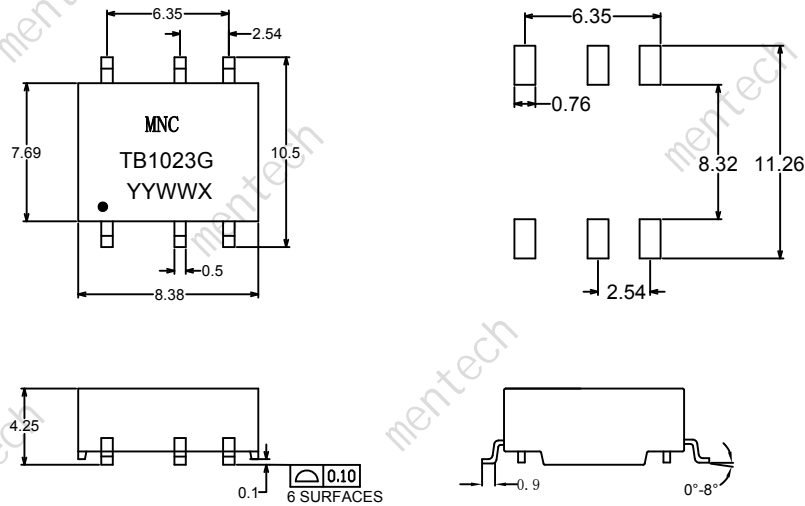
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- 1000V For 10 Years Operation.



Electrical Specifications @ 25°C

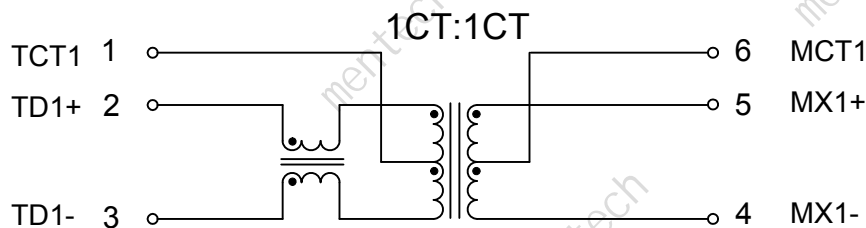
Part Number	Turns Ratio (±2%)	OCL (uH min)	DCR (Ω Max)		LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	HI-POT (Vrms)
		100KHz, 0.1V	(1-3) =(1-2)	(4-6)=(5-6)	100KHz, 0.1V,(SHORT 6-4-5)			
TB1023G	1:1	500	0.5	0.4	0.5	-0.25	-20	1mA 60S 3200V DC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

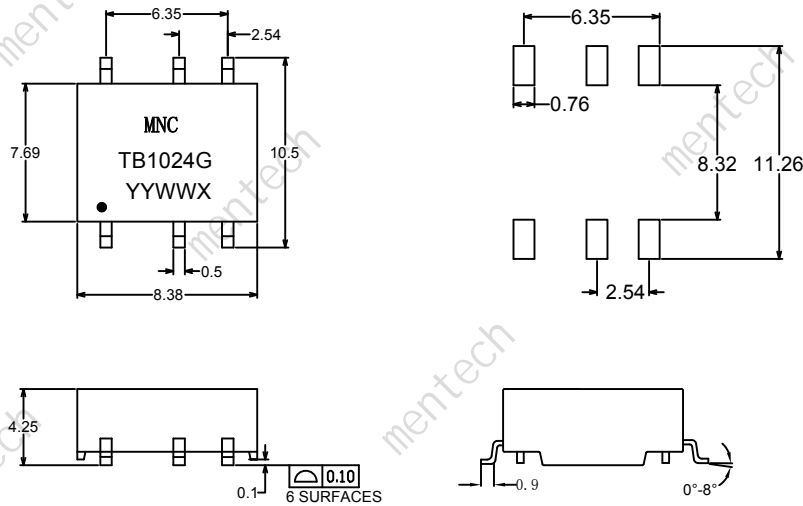


- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- 1000V For 10 Years Operation.



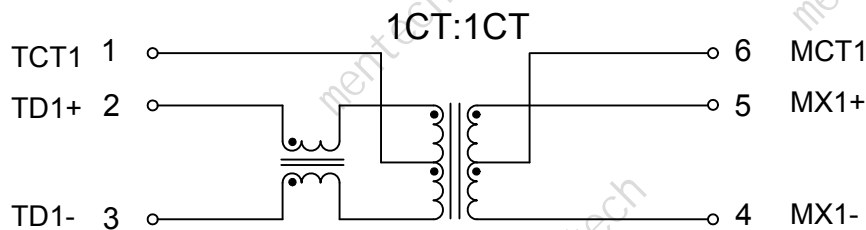
Electrical Specifications @ 25°C											
Part Number	Turns Ratio (±2%)	OCL(μH Min) @100KHz,0.1V	LK (μH Max)	Insertion Loss (dB Max)		Return Loss (dB Min)			DCR (Ω max)@25°C		HI-POT
	(2-3):(5-4)	(-40~150°C)	100KHz, 0.1V	1-80MHz	125MHz	1-30MHz	30-60MHz	60-80MHz	5-4	2-3	1mA 60S
TB1024G	1 : 1	300	0.5	-1.0	-3.0	-0.16	-12	-10	0.8	1.0	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



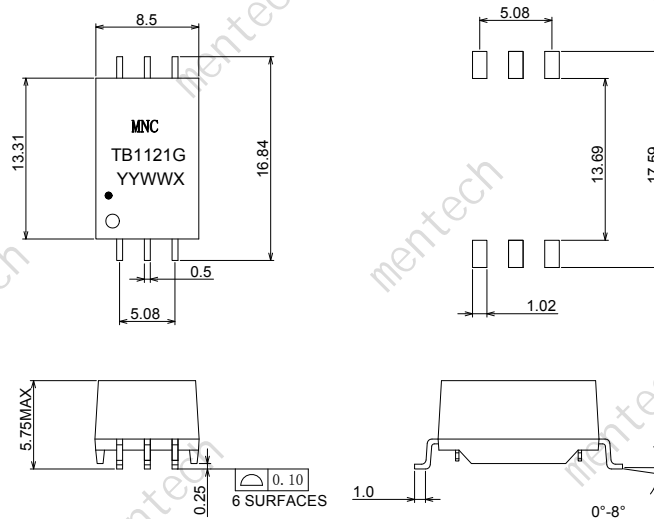
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHs Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance >11mm.
- Functional Insulation
- Working Voltage: 1000V For 15 Years
- Insulation Resistance:400 MΩ MIN
- Passed EMC Measurement



Electrical Specifications @ 25°C

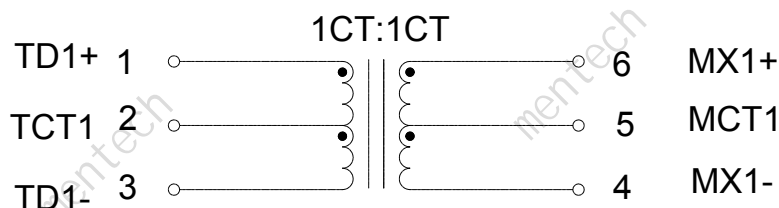
Part Number	Turns Ratio (±2%)	OCL(uH Min/Max) @100KHz,0.1V		LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR (Ω max)		HI-POT
	(1-3):(6-4)	-40°C ≤ T ≤ -30°C	-30°C ≤ T ≤ 125°C	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	1mA 60S
TB1121G	1 : 1	135/370	150/500	0.5	-0.25	-20	0.45	0.85	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



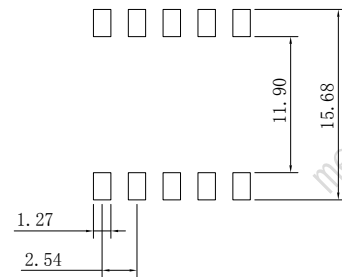
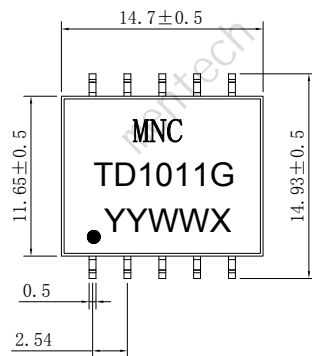
- SMT Package contains transmit transformers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 10mm.
- Functional Insulation
- Working Voltage: 1000V For 15 Years
- Insulation Resistance: 400 MΩ MIN
- Passed EMC Measurement



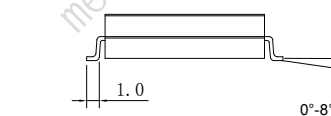
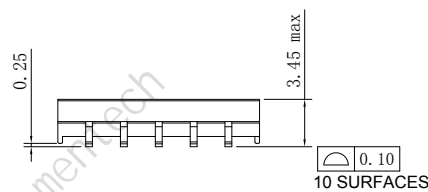
Electrical Specifications @ 25°C

Part Number	Turns Ratio (±2%)	OCL(uH Min/Max) @100KHz,0.1V	LK (uH Max)	DCR (Ω max)@25°C		Insertion Loss (dB Max)	Return Loss (dB Min)	CROSSTALK (dB Min)	CMRR (dB Min)		HI-POT
	PRI-SEC	-40°C TO 125°C.	100KHz, 0.1V	PRI	SEC	4MHz	4MHz	4MHz	1-10MHz	10-1000MHz	1mA 60S
TD1011G	1 : 1	150uH MIN,450uH MAX	0.5	0.45	0.85	-0.25	-20	-50	-35	-20	4300VDC

MECHANICAL

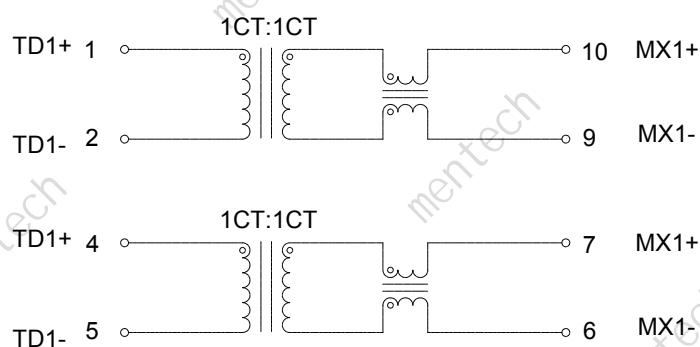


SUGGESTED LAND PATTERN



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



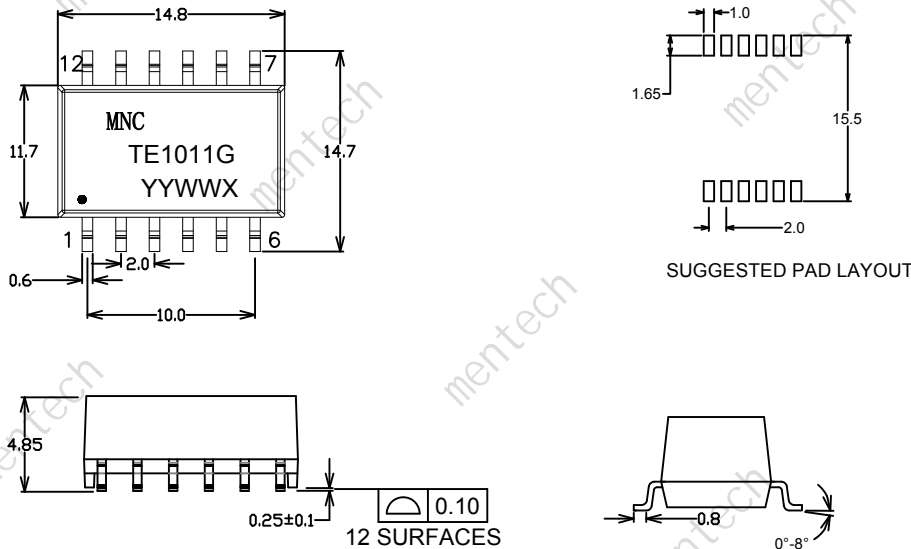
- SMT Package contains transmit transformers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 10mm.
- Working Voltage: 1600V For 15 Years
- Insulation Resistance: 400 MΩ MIN



Electrical Specifications @ 25°C

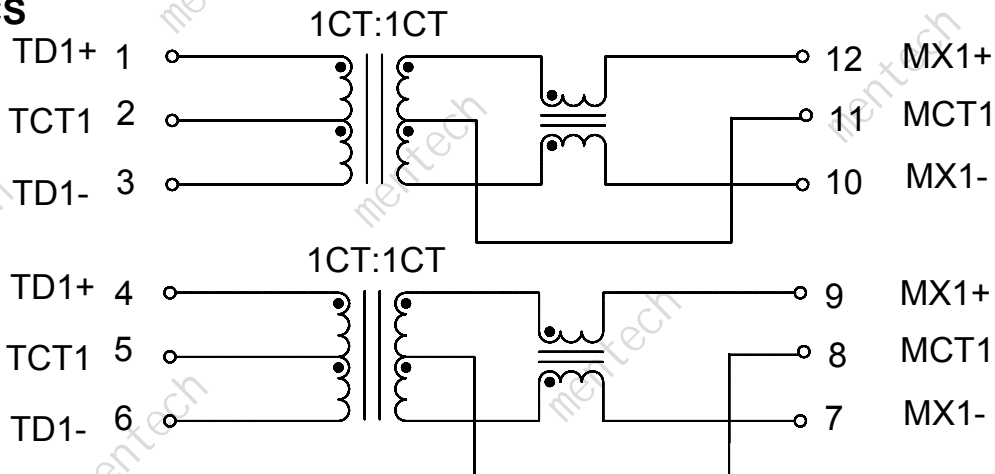
Part Number	Turns Ratio (±2%)	OCL (uH Min/MAX)	LK (uH Max)	Cww (pF Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)			HI-POT
	(PRI):(SEC)	100KHz, 0.1V	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	PRI	SEC	1-10MHz	10-200MHz	200-1000MHz	1mA 60S
TE1011G	1:1	150 / 450	0.5	25	-0.25	-20	0.45	0.85	-35	-20	-6	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm Pads

SCHEMATICS



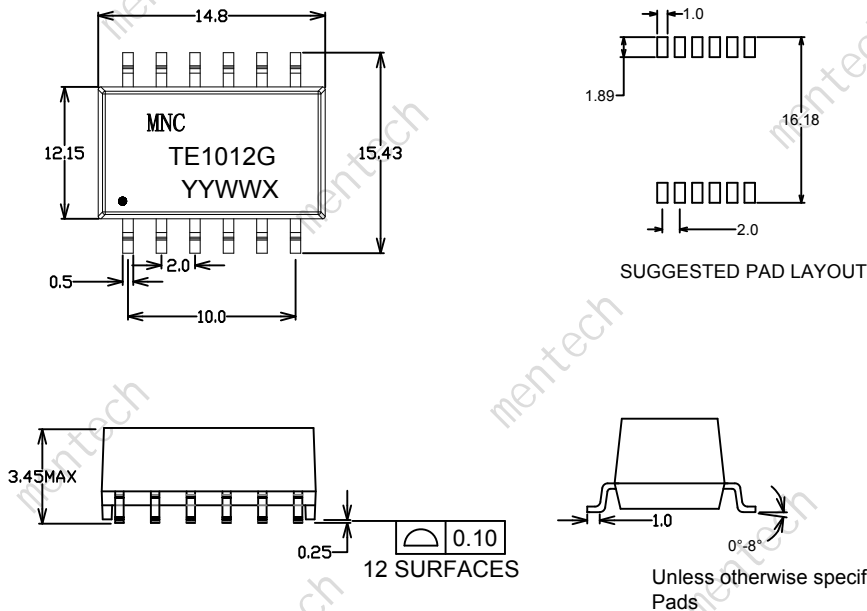
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance >10mm.
- Working Voltage: 1000V For 15 Years
- Insulation Resistance:400 MΩ MIN



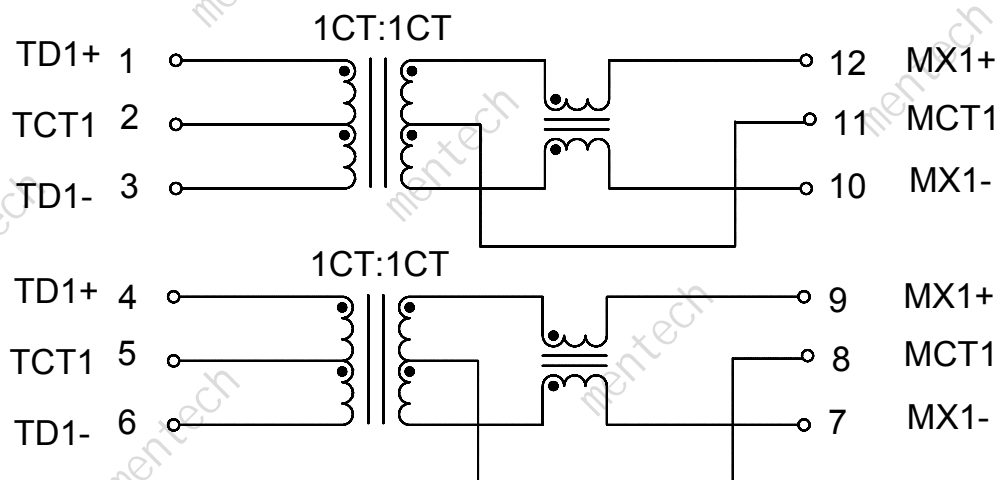
Electrical Specifications @ 25°C

Part Number	Turns Ratio (±2%)	OCL (uH Min)	LK (uH Max)	C _{ww} (pF Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		CMRR (dB Min)		CROSSTALK (dB Min)	HI-POT
	(PRI):(SEC)	100KHz, 0.1V	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	PRI	SEC	1-10MHz	10-200MHz	4MHz	1mA 60S
TE1012G	1 : 1	150 TO 450	0.5	25	-0.25	-20	0.45	0.85	-35	-20	-50	4300VDC

MECHANICAL



SCHEMATICS

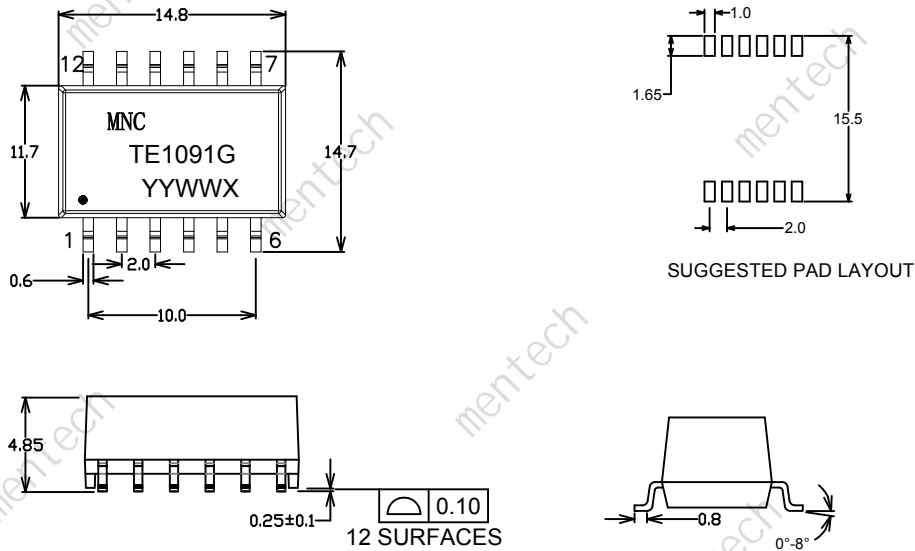


- SMT Package contains transmit transformers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.
- Creepage Distance > 10mm.
- Working Voltage: 1600V For 15 Years
- Insulation Resistance: 400 MΩ MIN



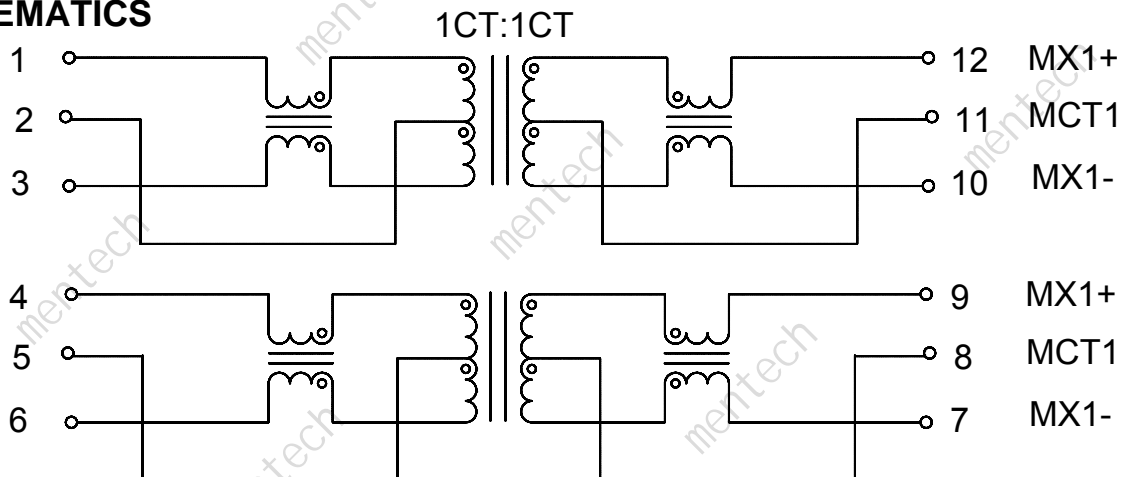
Electrical Specifications @ 25°C										
Part Number	Turns Ratio (±2%) (PRI):(SEC)	OCL (uH Min) 100KHz, 0.1V -40°C~+125°C	LK (uH Max) 100KHz, 0.1V	Insertion Loss (dB Max) 4MHz	Return Loss (dB Min) 4MHz	Corss Talk (dB Min) 1-10MHz 10-100MHz		DCR Ω max 25°C	CMRR (dB Min) 1-200MHz	HI-POT 1mA 60S 4300VDC
TE1091G	1 : 1	600	0.5	-0.25	-22	-50	-50+20*log10(f/10MHz)	1.2	-30	

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm Pads

SCHEMATICS



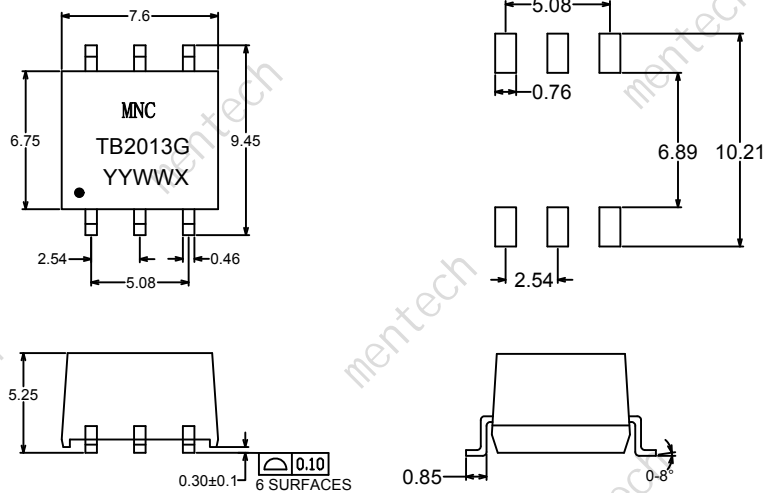
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliant.
- Operating Temperature Range: -40°C To 125°C.
- AEC-Q200 Qualified.
- Moisture Sensitivity Level: 1.
- Working voltage:1000V DC.



Electrical Specifications @ 25°C

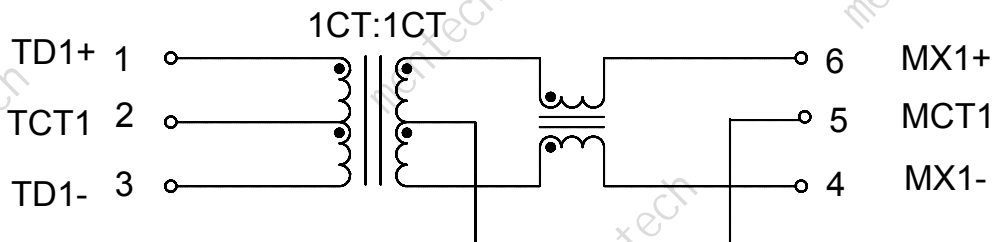
Part Number	Turns Ratio (±2%)	OCL(uH Min)	LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		Cww pF max	CMRR (dB Min)		HI-POT
	(1-3):(6-4)	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	100KHz, 0.1V	1-100MHz	100-200MHz	1mA 60S
TB2013G	1 : 1	300	0.5	-0.30	-20	0.60	1.20	28	-35	-20	4300VDC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



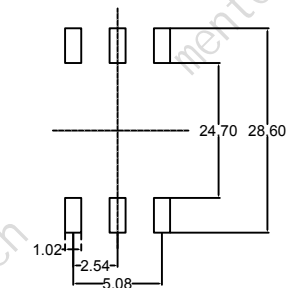
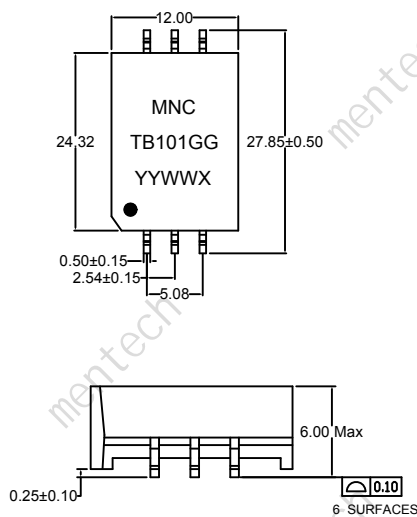
- RoHS compliant.
- Creepage distance > 22mm.
- Clearance distance > 20mm.
- Storage temperature: -40°C to +125°C.
- Operating temperature: -40°C to +125°C.



Electrical Specifications @25°C

Part Number	Turns Ratio (±2%)	OCL(μH) @100KHz, 0.1V		DC Resistance (Ω Max)		LK(μH Max) 100KHz, 0.1V	Insertion Loss (dB Max)	Return Loss (dB Min)	CMRR(dB Min)		HI-POT
	(1-3):(6-4)	(1-3)=(6-4)	(1-3)	(6-4)	(1-3) shorted (6-4)	4MHz	4MHz	1-10MHz	10.1-100MHz	1mA 60s	
TB101GG	1:1	150 Min 450 Max	0.80	1.0	0.70	0.50	20	-35	-20	6000VDC	

MECHANICAL

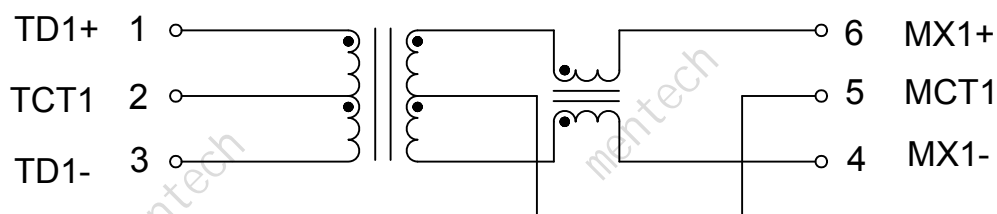


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



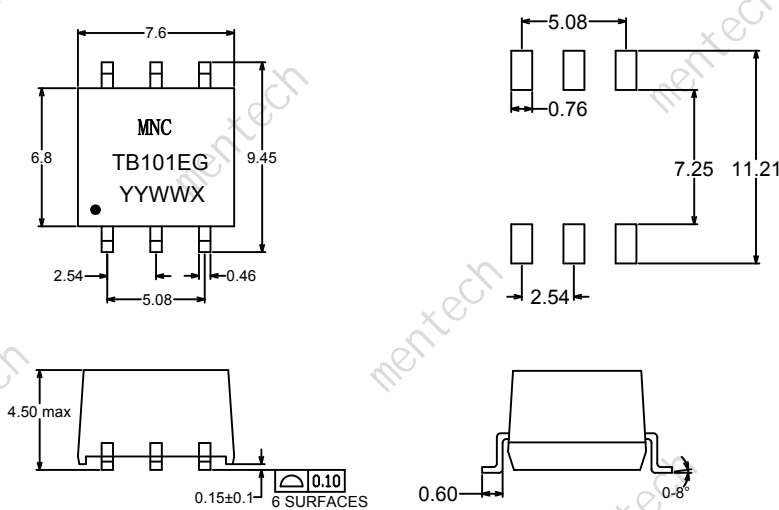
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliant.
- Operating Temperature Range: -40°C To 125°C.
- AEC-Q200 Qualified.
- Moisture Sensitivity Level: 1.
- Functional Insulation.
- 1000V For 15 Years Operation.



Electrical Specifications @ 25°C

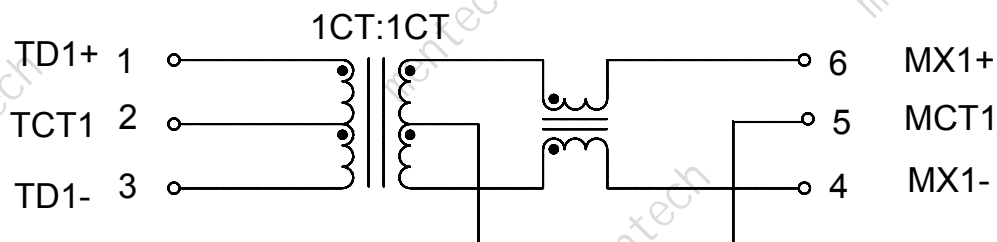
Part Number	Turns Ratio (±2%)	OCL(uH Min)	LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		C _{ww} pF max	CMRR (dB Min)		HI-POT
	(1-3):(6-4)	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	100KHz, 0.1V	1-100MHz	100-200MHz	1mA 60S
TB101EG	1 : 1	150	0.5	-0.25	-22	0.45	0.85	50	-35	-20	3000VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



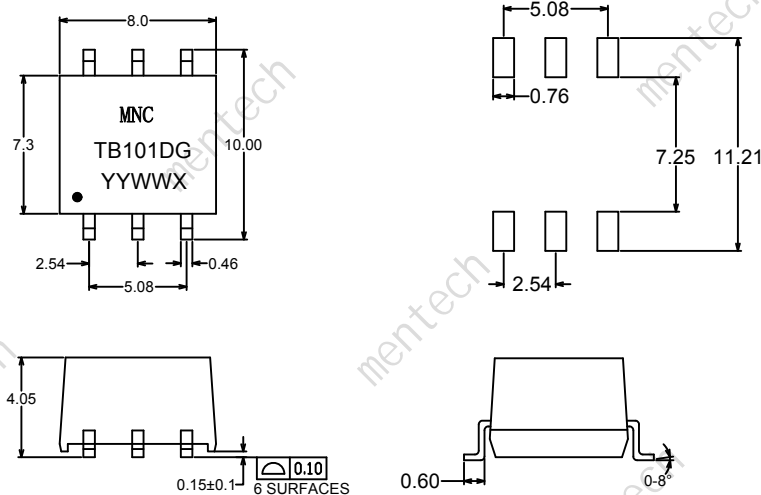
- SMT Package contains transmit transformers.
- Models matched to leading transceivers.
- RoHS Compliant.
- Operating Temperature Range: -40°C To 125°C.
- AEC-Q200 Qualified.
- Moisture Sensitivity Level: 1.
- Functional Insulation.
- 1000V For 15 Years Operation.



Electrical Specifications @ 25°C

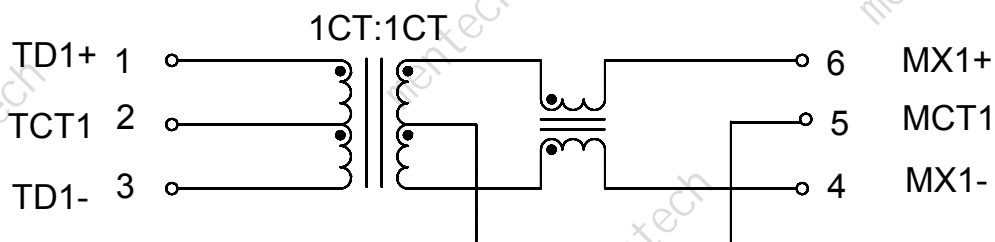
Part Number	Turns Ratio (±2%)	OCL(uH Min/Max)	LK (uH Max)	Insertion Loss (dB Max)	Return Loss (dB Min)	DCR Ω max		Cww pF max	CMRR (dB Min)		HI-POT
	(1-3):(6-4)	100KHz, 0.1V	100KHz, 0.1V	4MHz	4MHz	1-3	6-4	100KHz, 0.1V	1-100MHz	100-200MHz	1mA 60S
TB101DG	1 : 1	150/500	0.5	-0.25	-20	0.45	0.85	50	-35	-28	3000VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



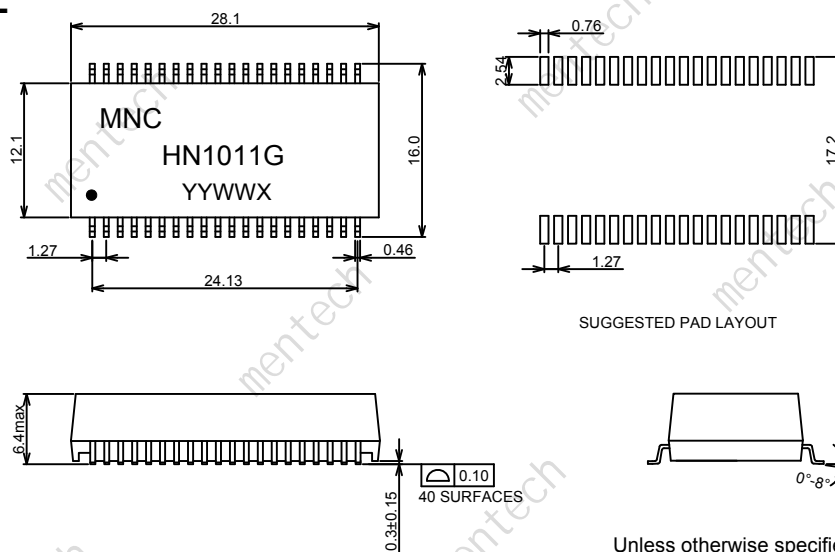
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +105°C.
- Operating temperature range: -40°C to +105°C.
- AEC-Q200 Qualified.



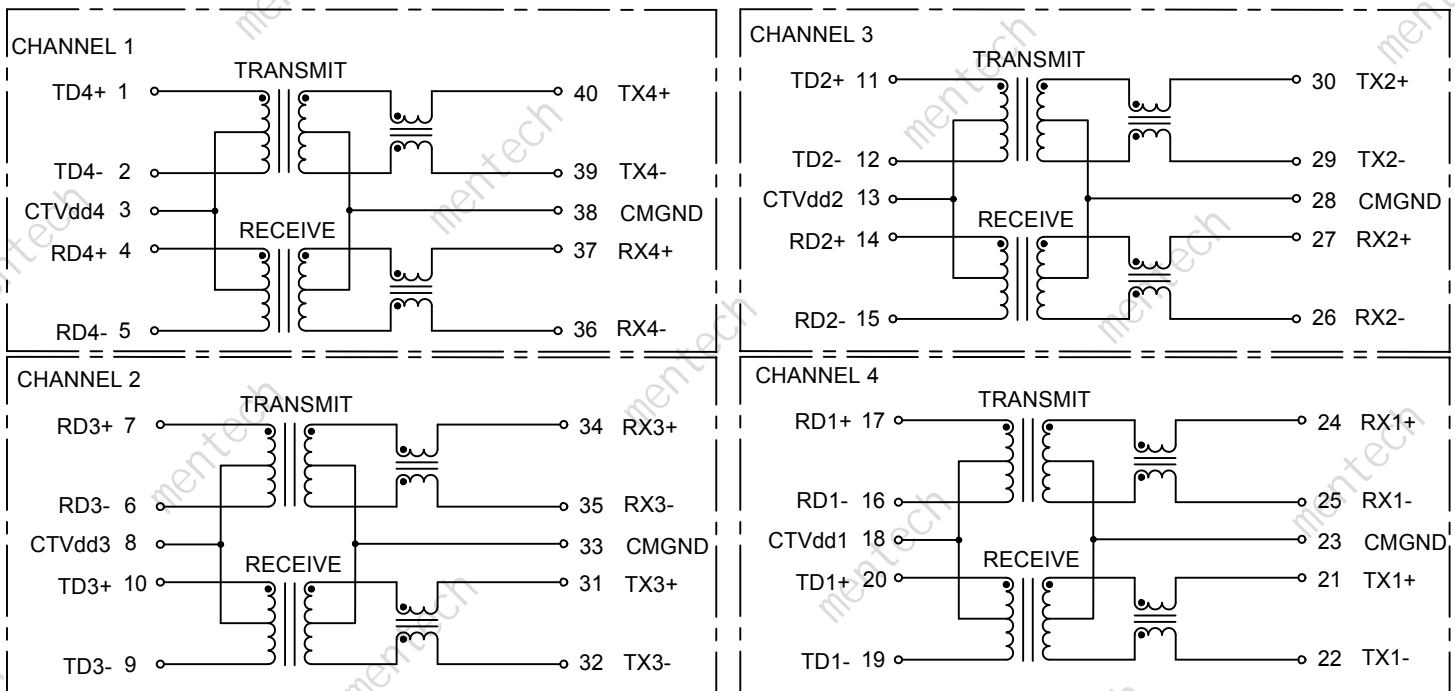
Electrical Specifications @25°C

Part Number	OCL(uH Min) 100KHz,0.1V With 8mA DC Bias -40°C To +105°C	Turns Ratio (±2%)	Insertion Loss (dB Max)			Return Loss (dB Min)			Cross talk (dB Min)		DCMR (dB Min)	DCR (Ω Max)	HI-POT (Vrms)
			100KHz	1-125MHz	0.1-30MHz	30-60MHz	60-80MHz	1MHz	10-100MHz	5-200MHz			
HN1011G	350	1CT:1CT	-1.2	-0.2-0.002*f ^{1.4}	-16	-10+20log(f/60)	-10	-50	-55+17*log(f/10)	-50+17log(f/5)	0.60	1500	

MECHANICAL



SCHEMATICS



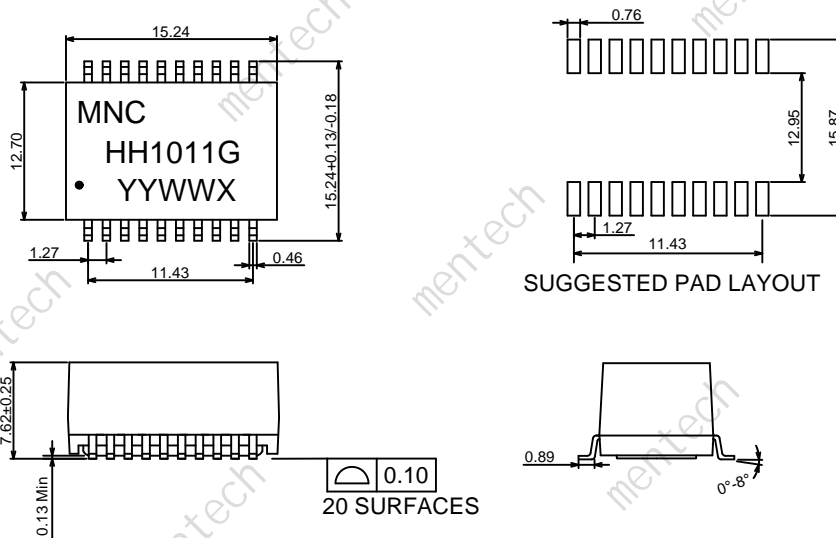
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



Electrical Specifications @25°C							
Part Number	OCL(μ H Min) @100KHz,0.1V	Turns Ratio (\pm 2%)	Insertion Loss (dB Max)				HI-POT (Vrms) 1 minute
	With 8mA DC Bias		0.1-30KHz	60MHz	80MHz	100MHz	
HH1011G	350	1CT:1CT	-1.0	-2.0	-2.5	-3.5	4000

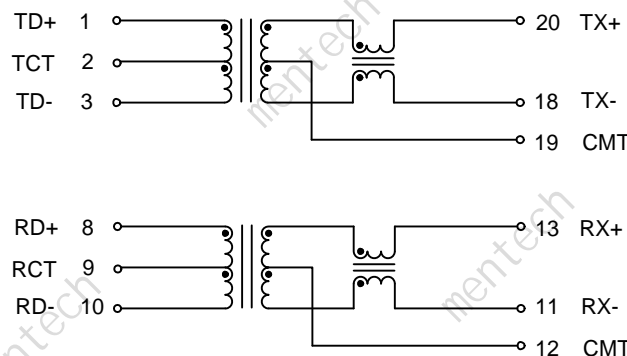
Electrical Specifications @25°C													
Return Loss (dB Min)						Cross Talk (dB Min)				DCMR (dB Min)			
5MHz	30MHz	50MHz	60MHz	80MHz	100MHz	1MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	200MHz
-18	-9	-6	-5	-3	-2	-45	-30	-27	-25	-36	-32	-30	-25

MECHANICAL

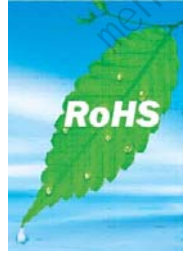


Unless otherwise specified all tolerances are: \pm 0.25 in mm

SCHEMATICS



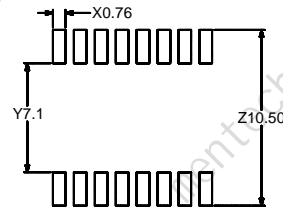
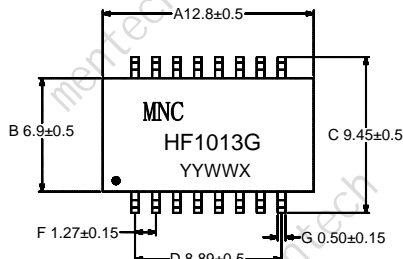
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +125°C
- AEC-Q200 Qualified



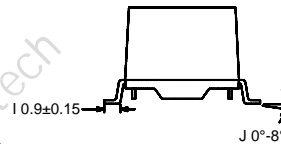
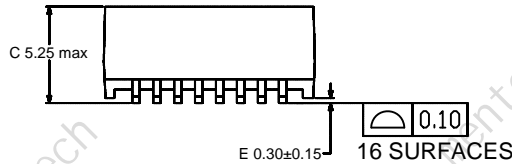
Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.2V With 8mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
HF1013G	350	1CT:1CT	-1.1	-18	-18+20*log10(f/30)	-12	-35	-30	-30	1500	

MECHANICAL

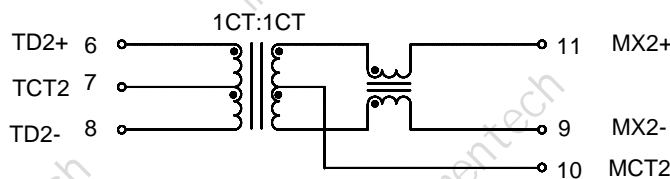
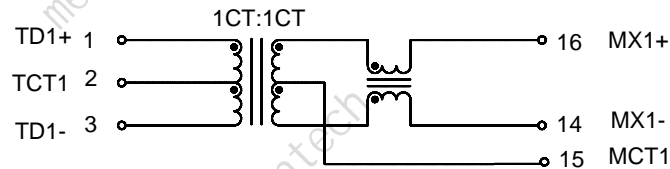


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



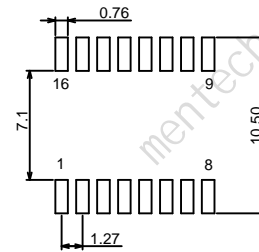
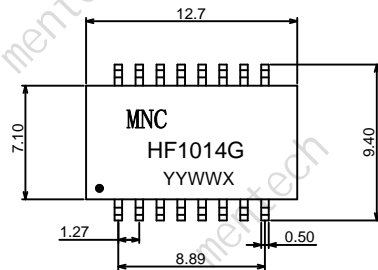
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



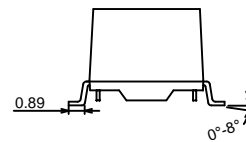
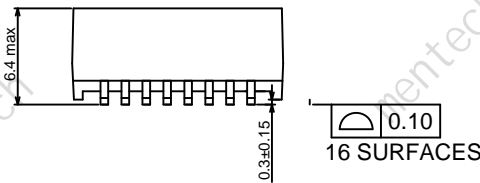
Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)	HI-POT (Vrms)
			1-100MHz	125MHz	5MHz	30-80MHz		
HF1014G	350	1CT:1CT	-1.0	-3.0	-18	-16+20log(f/30)	-50+17log(f/5)	2500

MECHANICAL

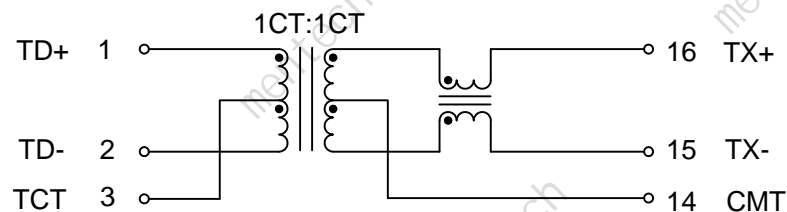


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



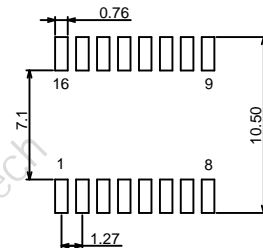
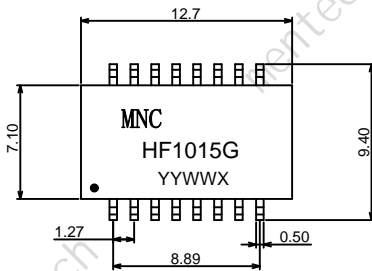
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



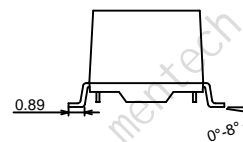
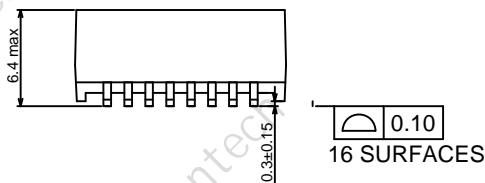
Electrical Specifications @25°C										
Part Number	OCL(μH Min) @100KHz,0.1V			Turns Ratio (±2%)		Insertion Loss (dB Max)@1-50MHz		Return Loss (dB Min) Transmit		
	+25°C	-40°C	+95°C	Transmit	Receive	Transmit	Receive	0.5-40MHz	60MHz	80MHz
HF1015G	200	100	100	1:1	1.5:1	-1.0	-3.0	-18	-14.5	-12

Electrical Specifications @25°C									
Part Number	Return Loss (dB Min) Receive				Cross Talk (dB Min)			Cww (pF Max)	HI-POT (Vrms)
	0.5MHz	40MHz	60MHz	80MHz	30MHz	60MHz	100MHz	100KHz,0.1V	6s
HF1015G	-18	-10	-8	-6	-45	-35	-30	18	1650

MECHANICAL

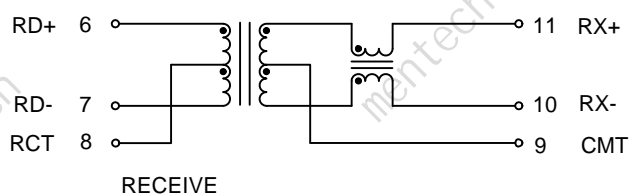
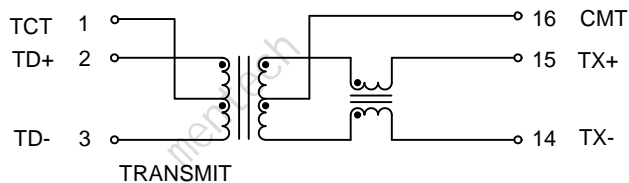


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



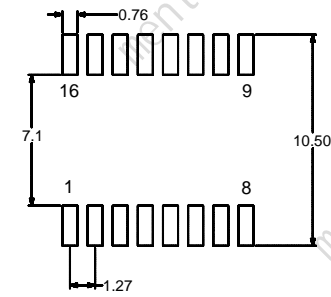
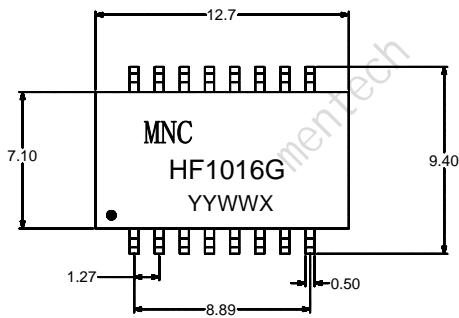
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- AEC-Q200 qualified.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.



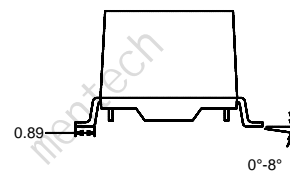
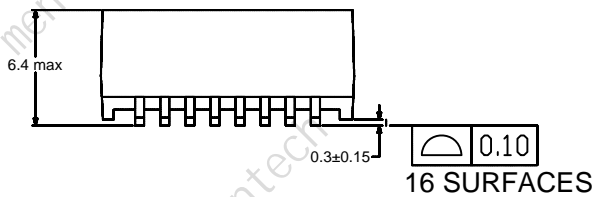
Electrical Specifications @25°C

Part Number	OCL(μH Min) @100KHz,0.1V		Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		DCMR (dB Min)	HI-POT (Vrms)
	25°C	-40°C to +125°C		1-80MHz	125MHz	5MHz	30-80MHz	1MHz	5-100MHz		
HF1016G	600	500	1:1	-1.0	-3.0	-25	-16+20*log (f/30)	-62	-45+21*log(f/30)	-50+17*log(f/5)	2500

MECHANICAL

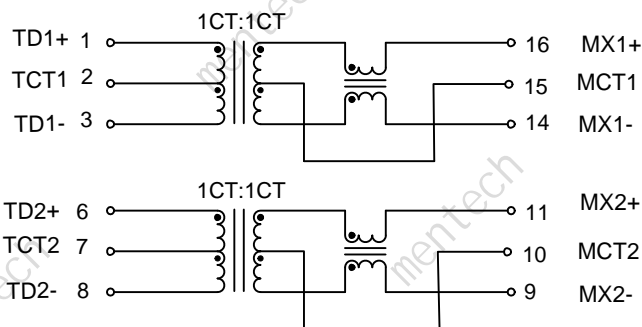


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



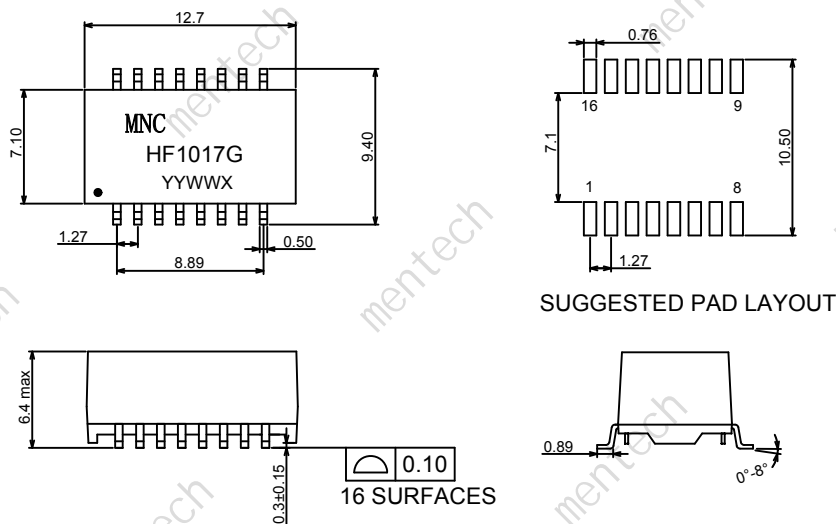
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature : -40°C to +125°C.
- Operating temperature : -40°C to +125°C.
- AEC-Q200 Qualified.



Electrical Specifications @25°C						
Part Number	OCL(uH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±2%)	LK(uH Max) @100KHz,0.1V		DCR (Ω Max)	
			1-3With16-14 shorted	6-8With11-9 shorted	1-3,6-8	16-14,11-9
HF1017G	350	1CT:1CT	0.5	0.5	1.4	1.0

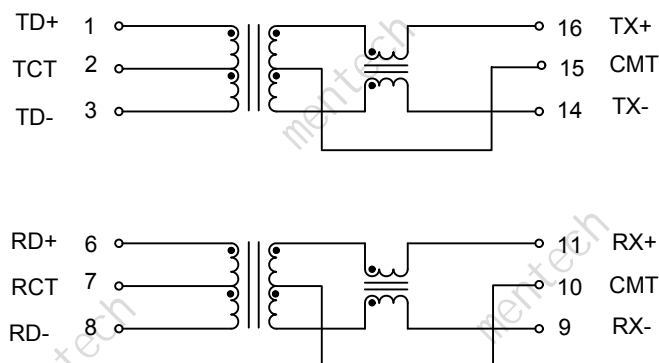
Electrical Specifications @25°C								
Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	DCMR (dB Min)	HI-POT (Vrms)	
1-100MHz	1-40MHz	40-100MHz	1-60MHz	60-100MHz	1-60MHz	60-100MHz		
-1.1	-16	-10+20*log(f/80)	-40	-35	-37	-30	-35	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



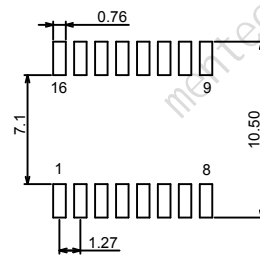
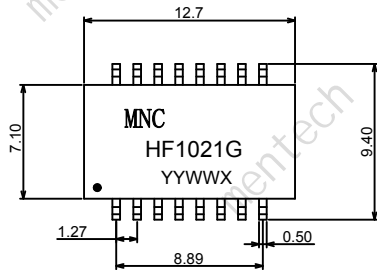
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature : -40°C to +125°C.
- Operating temperature : -40°C to +125°C.
- AEC-Q200 Qualified.



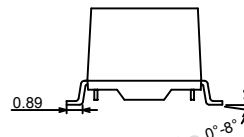
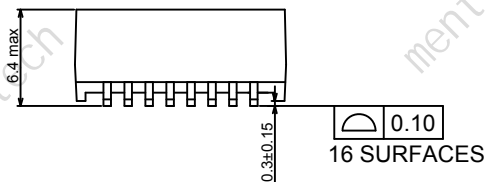
Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±2%)	DCR (Ω Max)	Insertion Loss (dB Max)		Return Loss (dB Min)			CMRR (dB Min)		Cross talk (dB Min)		HI-POT (Vrms)
	1-100MHz			1-30MHz	30-60MHz	60-80MHz	1-60MHz	60-100MHz	1-60MHz	60-100MHz			
HF1021G	350	1CT:1CT	1.2	-1.15	-18	-13	-12	-37	-28	-40	-35	1500	

MECHANICAL

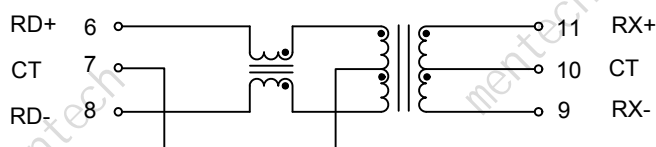
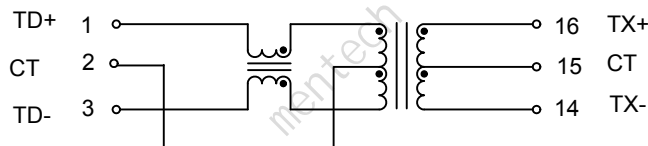


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



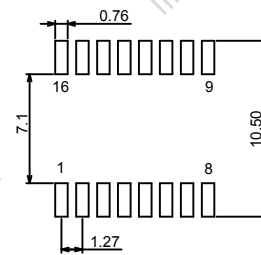
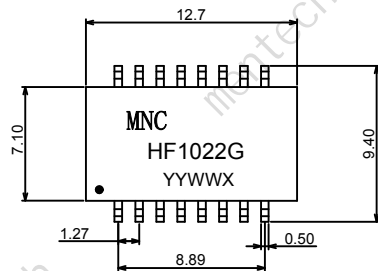
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature : -40°C to +125°C.
- Operating temperature : -40°C to +125°C.
- AEC-Q200 Qualified.



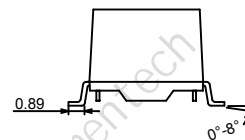
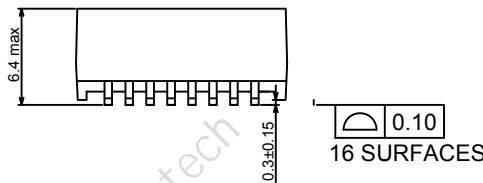
Electrical Specifications @25°C						
Part Number	OCL(uH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±2%)	LK(uH Max) @100KHz,0.1V		DCR (Ω Max)	
			1-3With16-14 shorted	6-8With11-9 shorted	1-3,6-8	16-14,11-9
HF1022G	350	1CT:1CT	0.5	0.5	1.4	1.0

Electrical Specifications @25°C									
Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)		DCMR (dB Min)		HI-POT (1ma,60s)
1-100MHz	1-40MHz	40-100MHz	1-60MHz	60-100MHz	1-60MHz	60-100MHz	30MHz	60MHz	2500VDC
-1.1	-16	-10+20*log(f/80)	-40	-35	-37	-30	-35	-35	

MECHANICAL

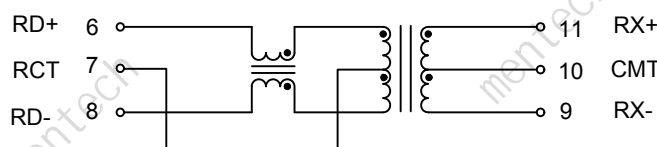
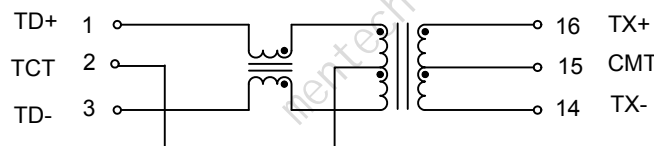


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



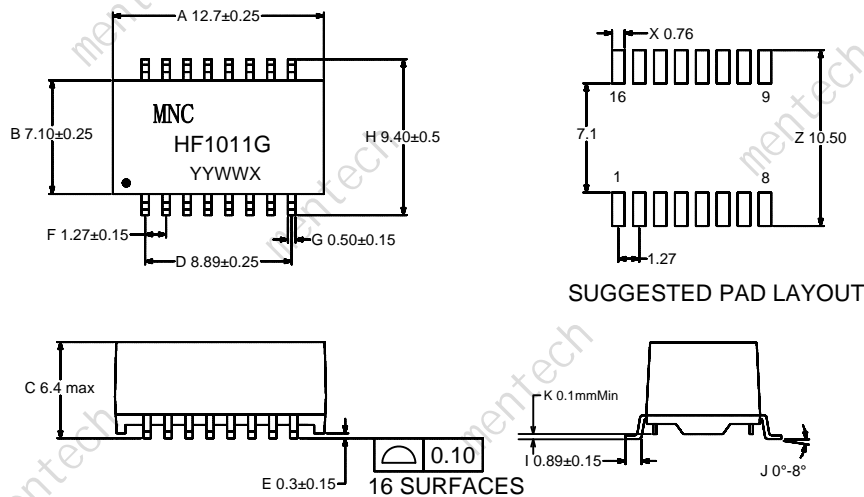
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +125°C
- AEC-Q200 Qualified



Electrical Specifications @25°C

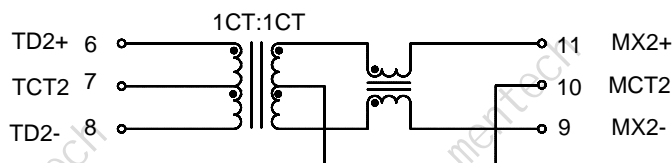
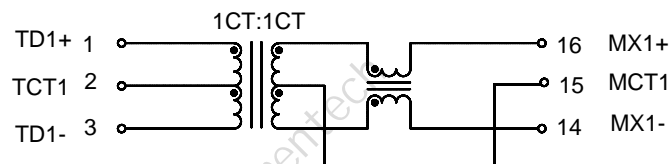
Part Number	OCL(uH Min) @100KHz,0.2V With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
HF1011G	350	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-30	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



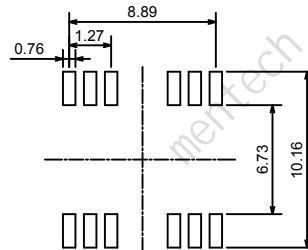
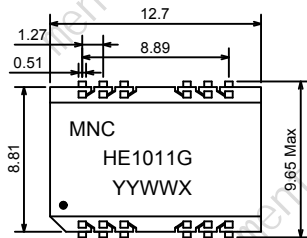
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



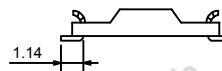
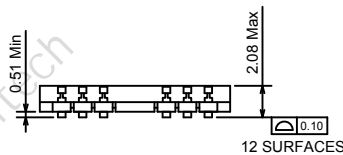
Electrical Specifications @25°C

Part Number	OCL(μH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)		DCR (Ω Max)	HI-POT (Vrms)
			100KHz	1-125MHz	0.1-40MHz	40-100MHz	1MHz	10-100MHz	2MHz	30-200MHz		
HE1011G	350	1CT:1CT	-1.2	-0.2-0.002*f ^{1.4}	-16	-10+20log(f/80)	-50	-55+22*log(f/10)	-42	-15+20log(f/200)	0.65	1500

MECHANICAL

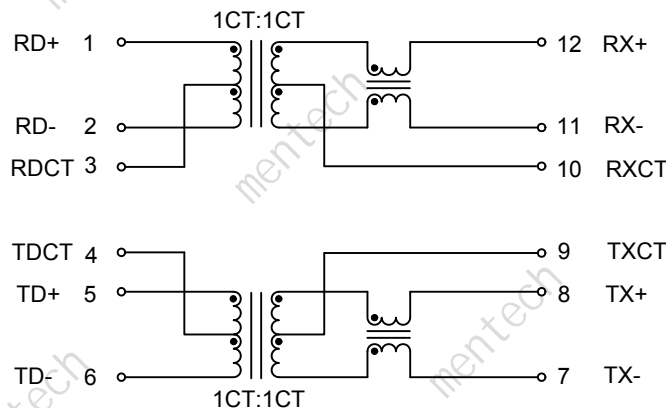


SUGGESTED PAD LAYOUT

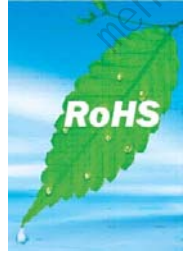


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



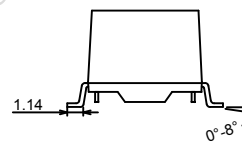
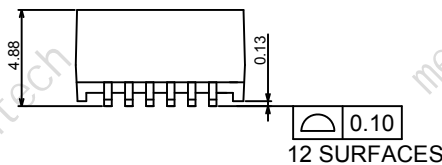
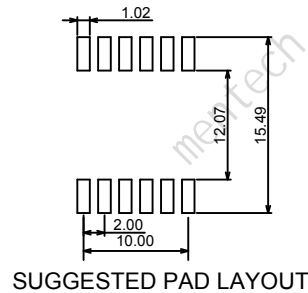
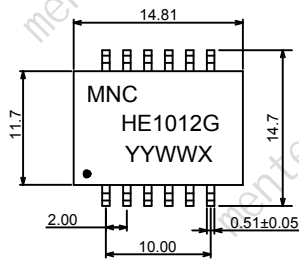
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



Electrical Specifications @25°C

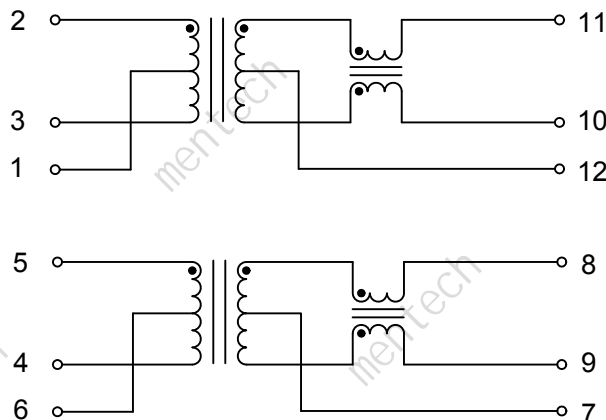
Part Number	OCL(μ H Min) @100KHz,0.1V -40°C To +125°C	Turns Ratio (\pm 2%)	DCR (Ω Max)		Insertion Loss (dB Max)	Return Loss (dB Max)	Cross Talk (dB Min)	CMRR (dB Min)	CDMR (dB Min)	HI-POT (VAC)
			Transformer side	CM Choke side						
HE1012G	120	1CT:1CT	0.50	0.80	-1.0	-20	-40	-20	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



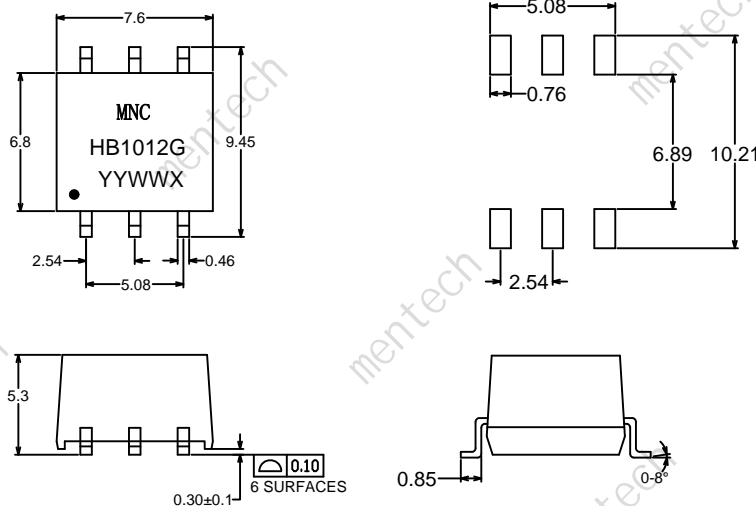
- Meets IEEE 802.3 Standards.
- Models matched to leading transceivers.
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- AEC-Q200 Qualified.



Electrical Specifications @ 25°C

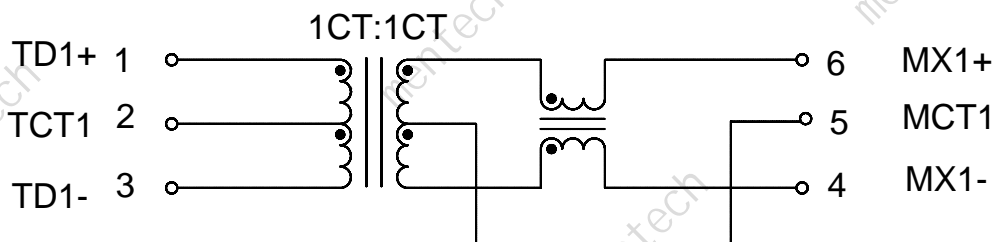
Part Number	Turns Ratio (±2%) (1-3):(6-4)	OCL(μH Min) @100KHz,0.1V With 8mA DC Bias	LK (μH Max) 100KHz, 0.1V	Insertion Loss (dB Max) 1-100MHz	Return Loss (dB Min)			CMRR (dB Min) 1-100MHz	HI-POT 1mA 60S 1500VAC
					30MHz	60MHz	100MHz		
HB1012G	1 : 1	350	0.5	-1.0	-20	-14	-9	-30	1500VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

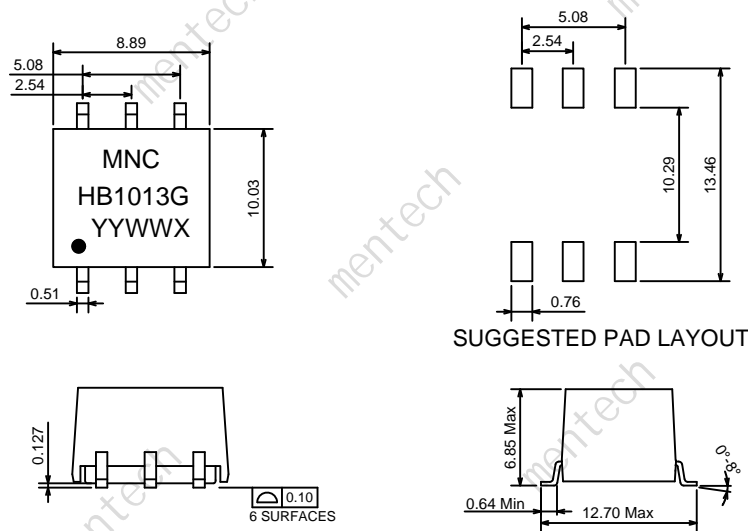


- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



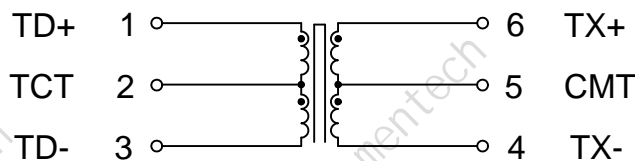
Electrical Specifications @25°C									
Part Number	OCL(uH) @100KHz,0.1V -40°C To +125°C		Turns Ratio (±2%)	Insertion Loss (dB Max)			Return Loss (dB Min)		HI-POT (VDC) 1 minute
	150 MIN	370 Max		1-60MHz	80MHz	125MHz	4MHz	30-80MHz	
HB1013G	150 MIN	370 Max	1CT:1CT	-1.0	-1.25	-3.0	-16	-14+20Log(f/30)	4300

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



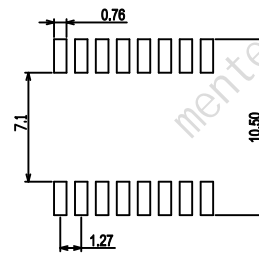
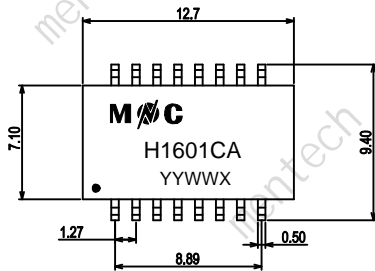
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +125°C
- AEC-Q200 Qualified



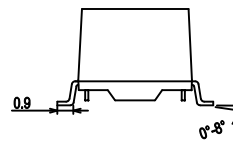
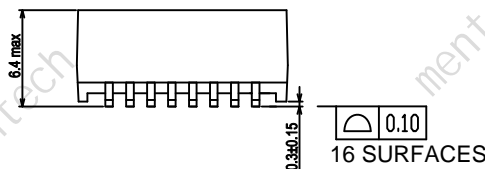
Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.2V With 8mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		DCMR (dB Min)	HI-POT (Vrms)
			1-100MHz	125MHz	5MHz	30-80MHz	1MHz	5-100MHz		
H1601CA	350	1CT:1CT	-1.1	-3.0	-18	-16+26log(f/30)	-62	-45+21*log(f/30)	-50+17log(f/5)	1500

MECHANICAL

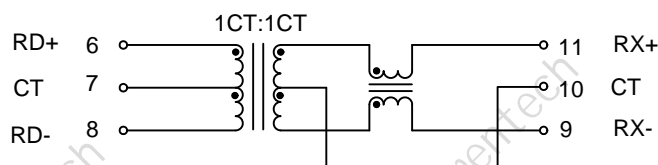
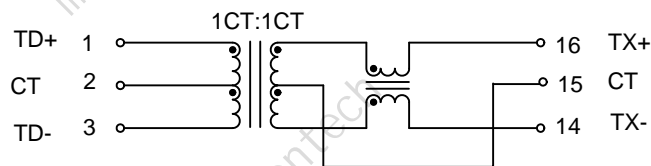


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



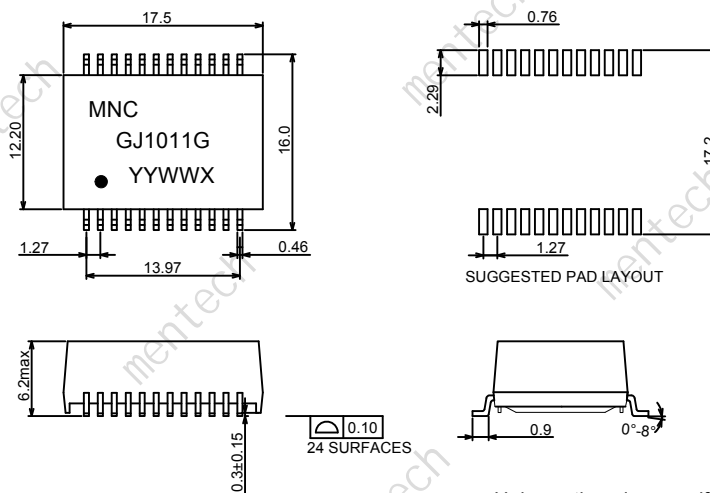
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +125°C.
- Operating temperature range: -40°C to +125°C.
- AEC-Q200 Qualified.



Electrical Specifications @25°C

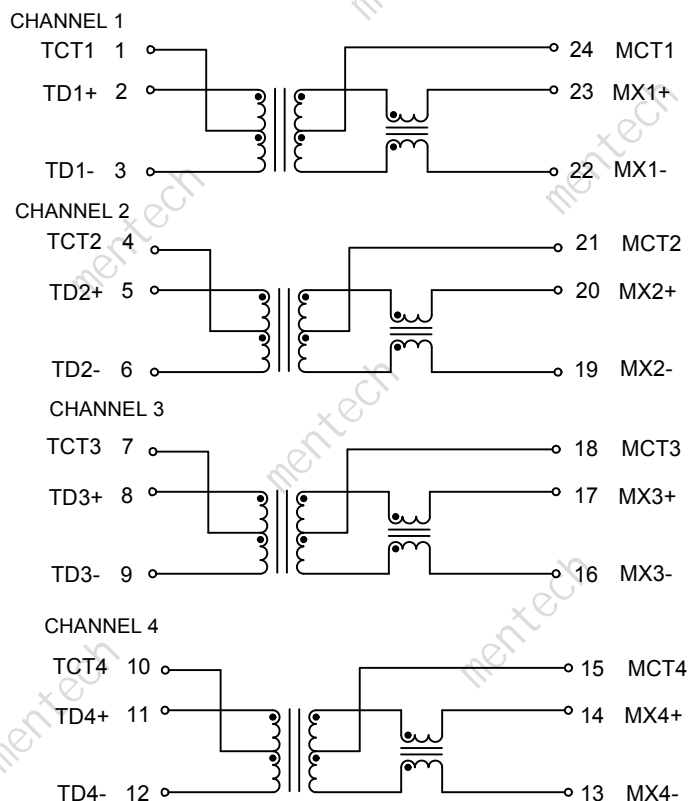
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)		DCR (Ω Max)	HI-POT (Vrms)
	With 8mA DC Bias		100KHz	1-125MHz	0.1-40MHz	40-100MHz	1MHz	10-100MHz	2MHz	30-200MHz		
GJ1011G	350	1CT:1CT	-1.2	-0.2-0.002*f ^{1.4}	-16	-10+20log(f/80)	-50	-55+22*log(f/10)	-50	-15+20log(f/200)	0.65	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



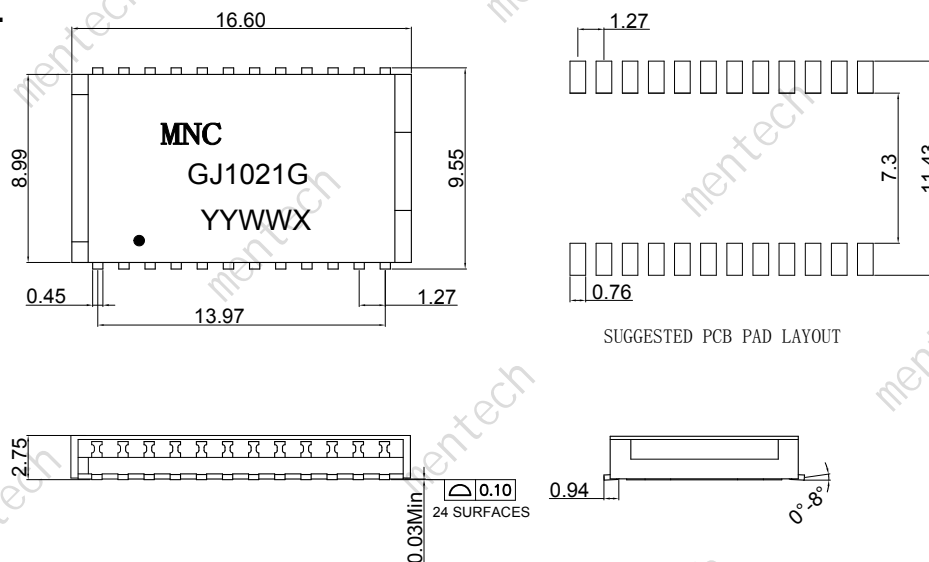
- Meets IEEE 802.3 Standards.
- RoHS Compliant.
- Storage temperature range: -40°C to +105°C.
- Operating temperature range: -40°C to +105°C.
- AEC-Q200 Qualified.



Electrical Specifications @25°C

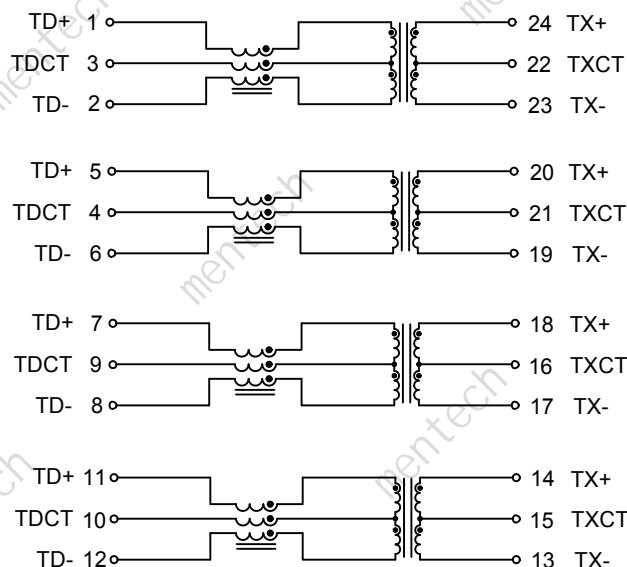
Part Number	OCL(uH Min) 100KHz,0.1V With 8mA DC Bias		Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)		DCR (Ω Max)	HI-POT (Vrms)
	25°C	-40°C and +85°C		100KHz	1-125MHz	0.1-40MHz	40-100MHz	1MHz	10-100MHz	2MHz	30-200MHz		
GJ1021G	360	300	1CT:1CT	-1.2	-0.2-0.002*f ^{1.4}	-16	-10+20log(f/80)	-50	-55+22*log(f/10)	-42	-15+20log(f/200)	0.65	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



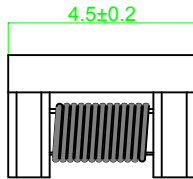
- AEC-Q200 qualified
- Impedance range from 700 ohms to 15000 ohms
- Inductance range from 11 uH to 200uH
- Controller area network (CAN)
- Ethernet architectures
- Operating temperature : -40°C to +125°C.
- Storage temperature : -40°C to +125°C.



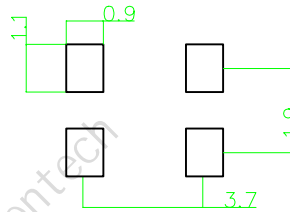
Electrical Specifications @25°C

Part Number	COMMON MODE Impedance ($\Omega @ 10M \pm 25\%$)	COMMON MODE Inductance	DC Resistance	Rated Current	Rated Volt	IR
		uh +50%/-30%	Ω max	mA max	Vdc max	Ω min
CM4532-110-A	700	11	0.6	250	50	10M
CM4532-220-A	1000	22	1.0	200	50	10M
CM4532-510-A	2000	51	1.2	200	50	10M
CM4532-101-A	5000	100	3.2	150	50	10M
CM4532-201-A	15000	200	4.5	100	50	10M

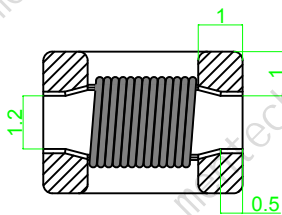
MECHANICAL



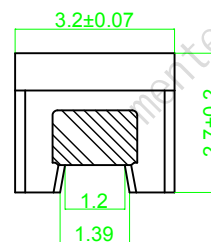
FRONT VIEW



SUGGESTED PAD LAYOUT



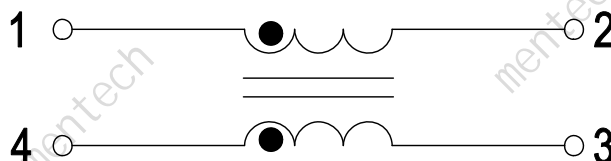
BOTTOM VIEW



SIDE VIEW

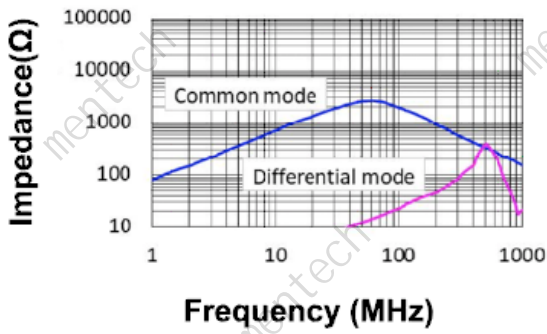
Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

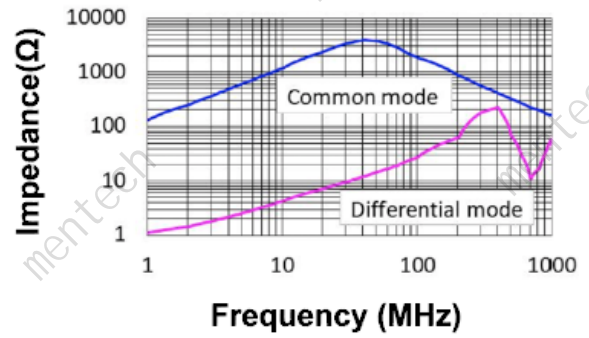


Impedance Frequency

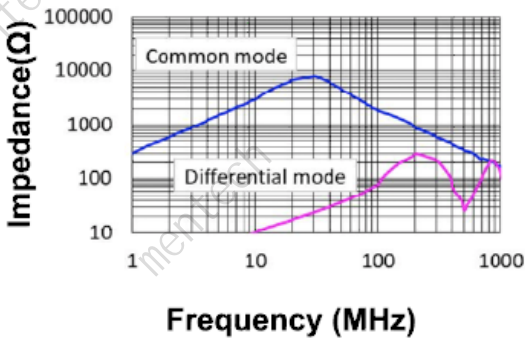
CM4532-110-A



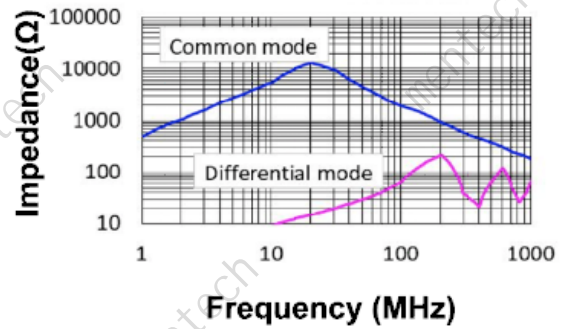
CM4532-220-A



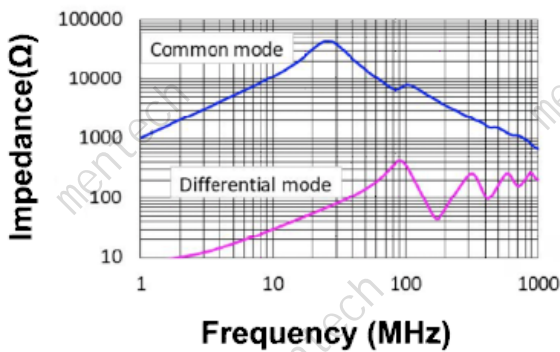
CM4532-510-A



CM4532-101-A



CM4532-201-A



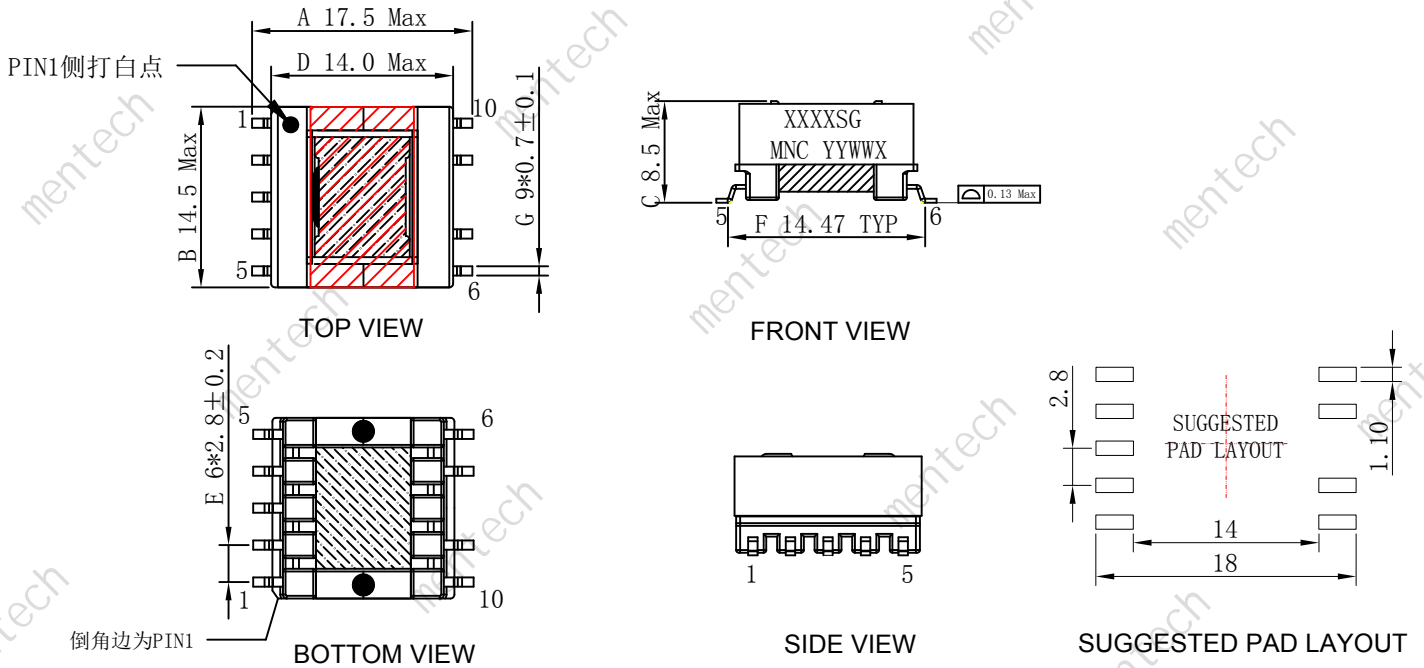
- AEC-Q200 qualified.
- IEC62368-1 Compliancy.
- RoHS Compatible.
- Storage temperature range : -40°C to +125°C.
- Operate temperature range: -40°C to +125°C



Electrical Specifications @25°C

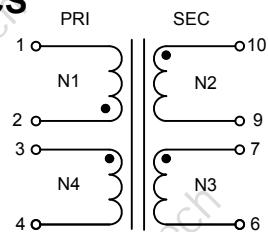
Part Number	TR(±3%)@20KHz,0.1V	OCL(uH) @100KHz,0.1V	LK (uH max)	DCR(mΩ)				HI-POT(1mA/60S,AC)		
	N1:N2:N3:N4			N1	N2	N3	N4	Pri-Sec	wdg-core	N3-N4
TTAEFD14-1411SG	1:1:0.6818:0.6818	300 Min	6	300Max	300Max	250Max	280Max	2.7kV	1.5kV	2.5kV
TTAEFD14-1673SG	1:2.333:2.333:0.5556	13±12.5%	0.2	100Max	288Max	356Max	100Max	2.5KV	1.5KV	2.5KV
TTAEFD14-1779SG	1:3:3:1.667	15±10%	0.2	56±14	650±130	650±130	425±85	2.5KV	1.5KV	2.0KV
TTAEFD14-1780SG	1:3:3:1.667	10±12.5%	0.2	72Max	658Max	941Max	276Max	2.7KV	1.0KV	2.5KV
TTAEFD14-2128SG	1:3.75:3.75:1.75	7±12.5%	0.2	55±11	650±130	800±160	215±43	2.7KV	1.5KV	2.5KV
TTAEFD14-2213SG	1:3:3:1.667	15±12.5%	0.2	72Max	780Max	780Max	510Max	2.7KV	1.2KV	2.0KV

MECHANICAL DIMENSIONS(Unit:mm)

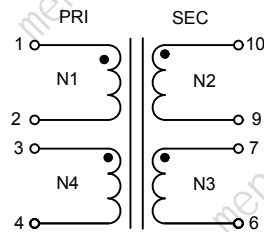


Unless otherwise specified all tolerances are:±0.30mm.

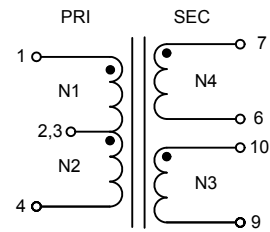
SCHEMATICS



TTAEFD14-1779SG
TTAEFD14-1673SG
TTAEFD14-2213SG



TTAEFD14-1780SG
TTAEFD14-2128SG



TTAEFD14-1411SG

● Start Point

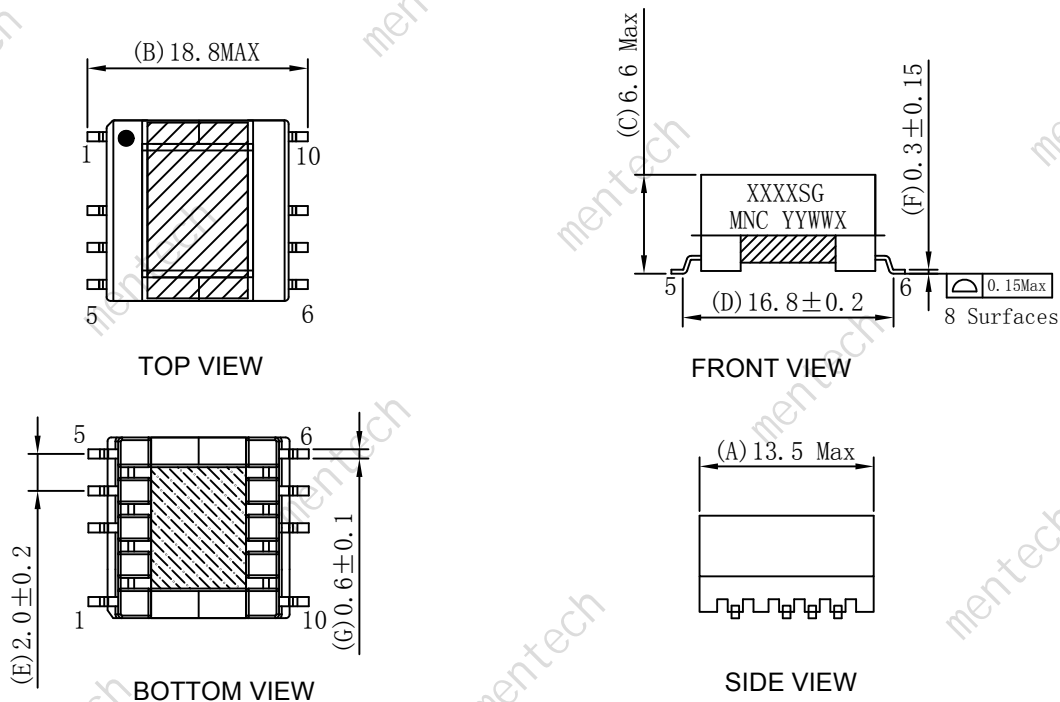
- AEC-Q200 qualified.
- IEC62368-1 Compliancy.
- RoHS Compatible.
- Storage temperature range : -40°C to +125°C.
- Operate temperature range: -40°C to +125°C



Electrical Specifications @25°C

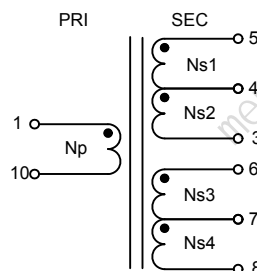
Part Number	TR(±3%)@100KHz,0.1V	OCL(uH min) @100KHz,0.1V	LK (uH max)	DCR(mΩ max)			HI-POT PRI-SEC
	NP:NS1:NS2:NS3:NS4			1-10	5-3	6-8	
TTAEFD14-1857SG	17:18:5:18:5	150	0.4	370	880	780	2000Vac/1mA/1S
TTAEPC13-2085SG	17:18:3:18:3	150	0.4	370	880	780	2000Vac/1mA/1S
TTAEPC13-2136SG	13:18:5:18:5	100	0.3	170±60	640±160	580±140	2000Vac/1mA/1S
TTAEPC13-2058SG	12:22:6:22:6	100	0.4	370	880	780	2000Vac/1mA/1S
TTAEPC13-2074SG	17:20:9:20:9	150	0.4	370	880	780	2000Vac/1mA/1S
TTAEPC13-2183SG	13:16:5:16:5	100	0.4	360	880	780	2000Vac/1mA/1S

MECHANICAL DIMENSIONS(Unit:mm)



Unless otherwise specified all tolerances are:±0.30mm.

SCHEMATICS



● Start Point

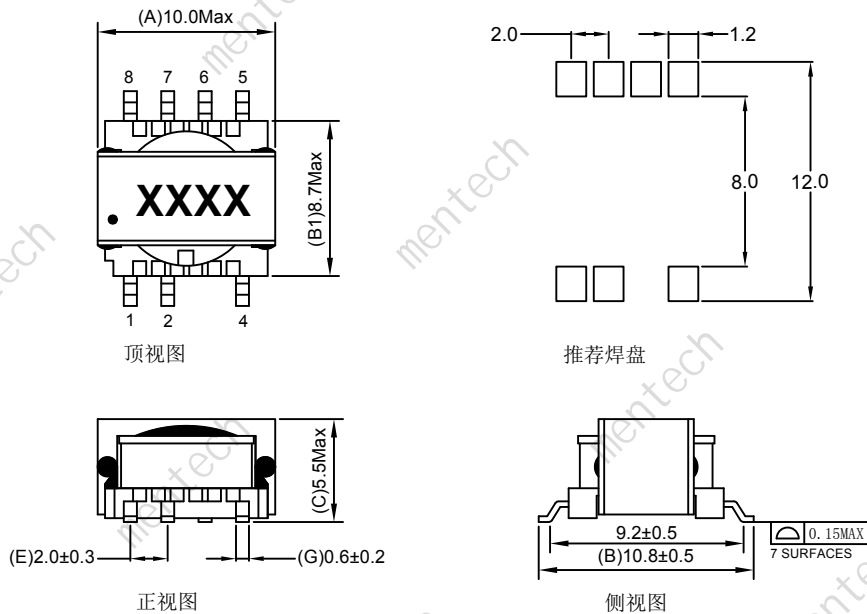
- AEC-Q200 qualified.
- IEC62368-1 Compliancy.
- RoHS Compatible.
- Storage temperature range : -40°C to +125°C.
- Operate temperature range: -40°C to +125°C



Electrical Specifications @25°C

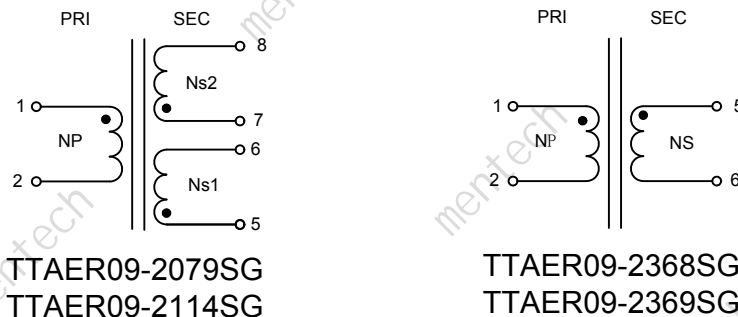
Part Number	TR(±3%) @100KHz,0.1V	OCL(uH)	LK	DCR(mΩ)			HI-POT(1mA/2S,AC)			INTERTURN VOLTAGE
	NP:Ns1:Ns2	@100KHz,0.1V	(uH max)	NP	Ns1	Ns2	Pri-Sec	wdg-core	Ns1-Ns2	1.0KV,5 pulses
TTAER09-2079SG	17:19:5	230 Min	2	275±15%	380±20%	115±20%	1.2kV	1.2kV	1.2kV	/
TTAER09-2114SG	17:12:5	230 Min	2	340Max	330Max	135Max	1.5KV	1.2KV	1.2KV	/
TTAER09-2368SG	17:26	230 Min	2	340Max	800Max	/	1.5KV	1.2KV	/	Area≤10%
TTAER09-2369SG	17:19	230 Min	2	340Max	440Max	/	1.5KV	1.2KV	/	Area≤10%

MECHANICAL DIMENSIONS(Unit:mm)



Unless otherwise specified all tolerances are:±0.30mm.

SCHEMATICS



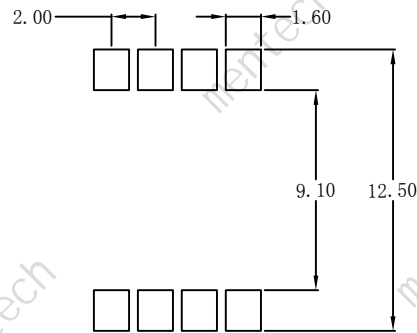
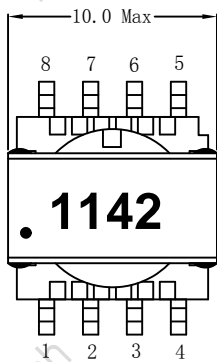
● Start Point

- RoHS Compliant
- IEC62368 Compliancy
- AEC-Q200 +125°C(Grade1) qualified
- Storage temperature range : -40°C to +125°C
- Operate temperature range: -40°C to +125°C (including self-temperature rise)

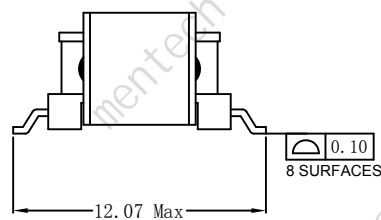
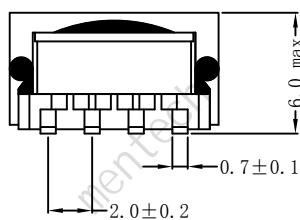


Electrical Specifications @25°C							
Part Number	Turns Ratio (±3%)	OCL(μH) @500KHz,0.5V	LK(μH MAX) @500KHz,0.5V	DCR (mΩ max)			
	4-3:2-1:8-7:6-5	4-3=2-1	Pri (Short other pins)	4-3	2-1	8-7	6-5
TTER09-1142SG	8:8:12:12	45.6 min	1.0	130	130	260	260

MECHANICAL DIMENSIONS(Unit:mm)

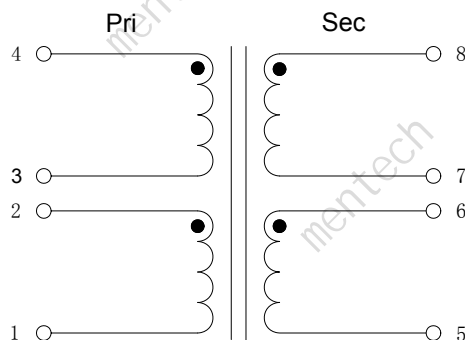


SUGGESTED PAD LAYOUT



Units is mm
Unless otherwise specified all tolerances are:Typical

SCHEMATICS



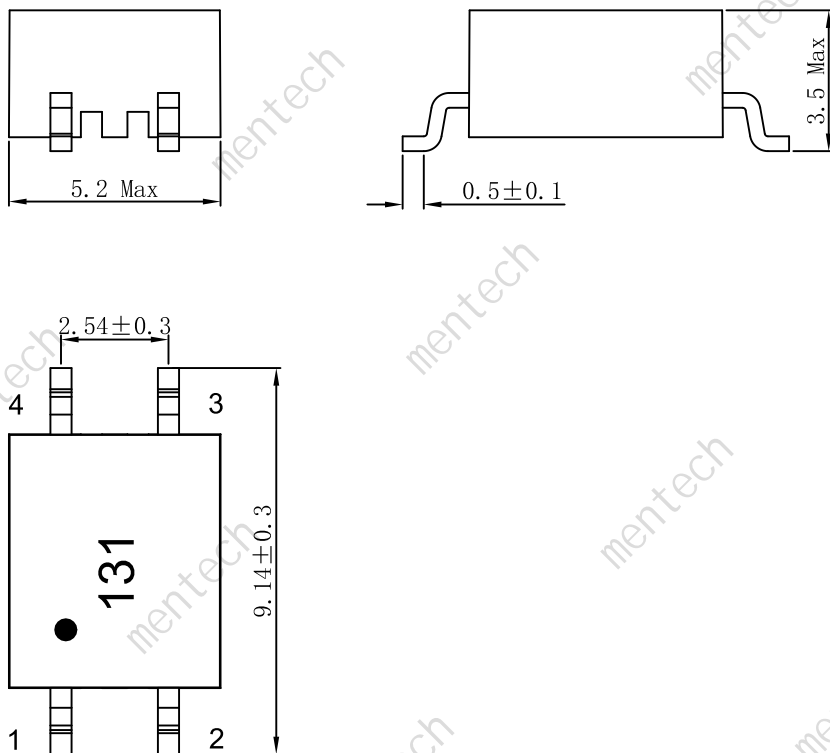
● Start Point

- CMC Choke.
- IEC62368-1 Compliancy.
- RoHS Compliance.
- Operate temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +125°C
- AEC-Q200 to be qualified.



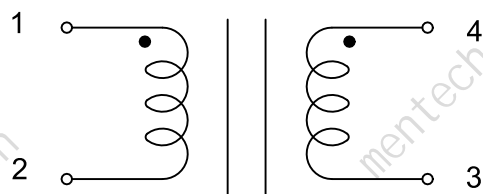
Electrical Specifications @ 25°C				
Part Number	OCL(μH Min) 100KHz,10mV	OCL(μH Nom) 100KHz,10mV -40°C	DCR(mΩ Max)	Hi-Pot Pin1-4
		1-2,4-3	1-2,4-3	1-2,4-3
CMA0402SG131U	125	120	250	AC 3750V

MECHANICAL



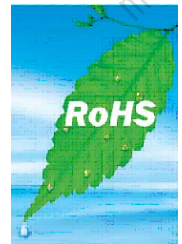
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



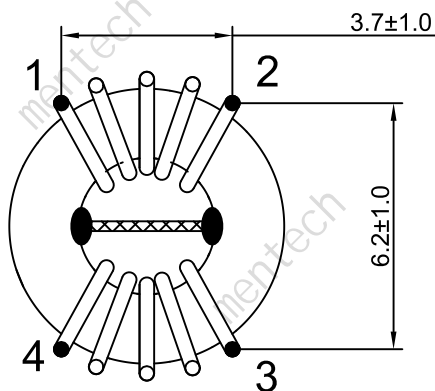
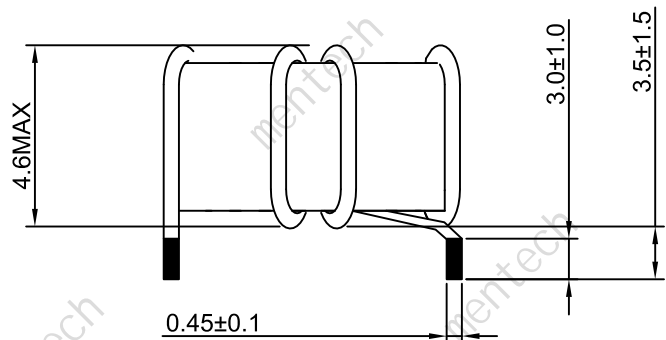
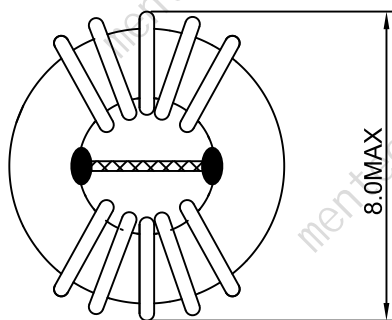
● Winding Start

- Common mode chokes for AC Power Lines
- Toroidal construction
- Storage temperature range : -40°C to +125°C.
- Operate temperature range: -40°C to +125°C (including self-temperature rise)



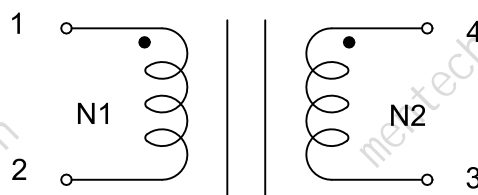
Electrical Specifications @25°C				
Part Number	OCL (μ H Min) @1KHz, 0.3V	DCR (m Ω MAX)	Turns Ratio @20KHz, 1.0V	Hi-Pot (1mA, 3S)
		1-2, 4-3	1-2, 4-3	N1:N2
CMA0603-561U	560	15.0	6:6 \pm 2%	500VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

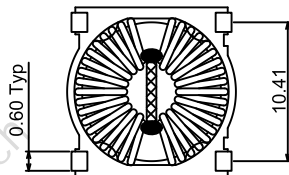
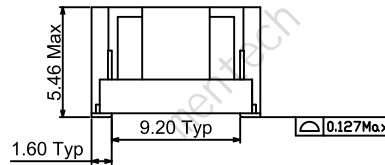
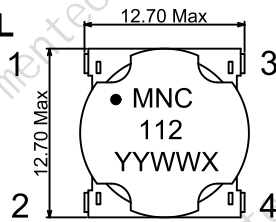


- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- Storage Temperature Range: -40°C TO 125°C.
- AEC-Q200 to be Qualified.



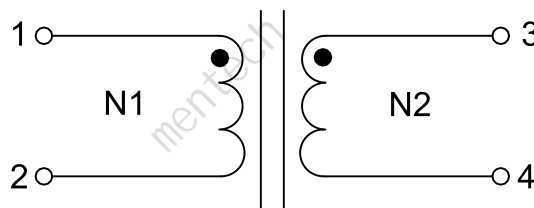
Electrical Specifications @ 25°C							
Part Number	Turns Ratio @10KHz,1V	OCL(mH) @100KHz,0.1V		DCR (mΩ Max)		HI-POT @50Hz,1mA,1s	Current (A Max)
		1-2	3-4	1-2	3-4		
CMA0903SG112N	1 : 1±5%	1.17±35%	1.17±35%	200	200	1000VAC	1.22

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



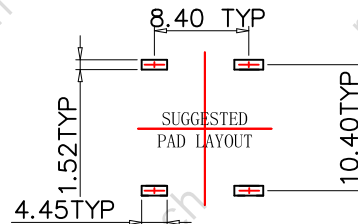
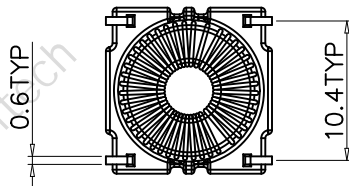
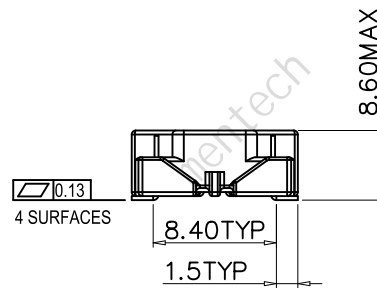
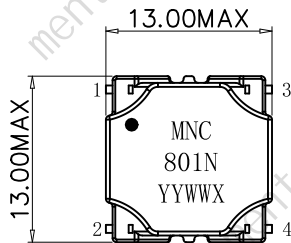
- RoHS Compliance.
- Operating Temperature Range: -40°C TO 125°C.
- Storage Temperature Range: -40°C TO 125°C.
- AEC-Q200 to be Qualified.



Electrical Specifications @ 25°C

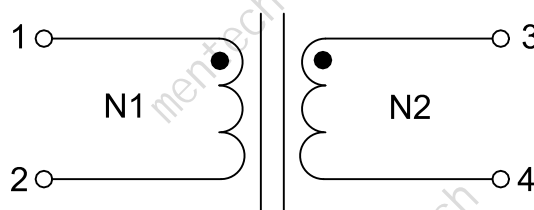
Part Number	OCL(μH) @100KHz,0.1V	DCR (mΩ Max)	LK(μH Min) @100KHz,0.1V	SRF (MHz TYP)	Impedance at SRF (Ω TYP)
CMA953SG801N	800±35%	27	1.5	20	1300

MECHANICAL

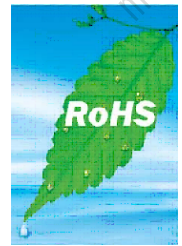


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

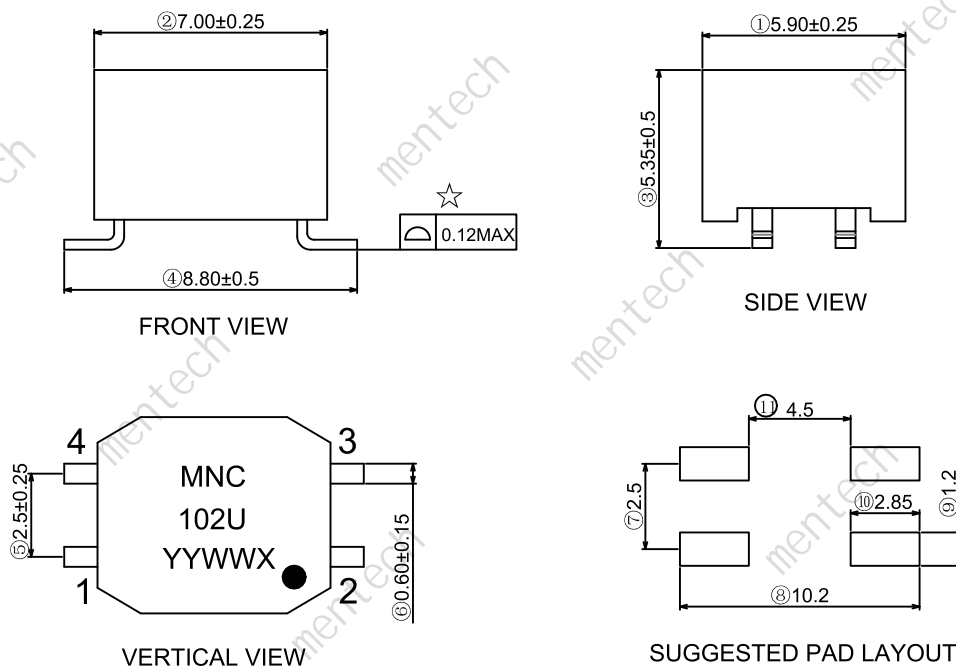


- RoHS Compliant.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



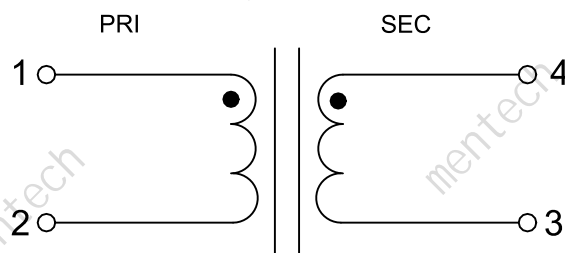
Electrical Specifications @25°C				
Part Number	Rated Inductance (mH) @100KHz, 0.1mA	Stray Inductance (nH) @100KHz, 5mA	DCR (mΩ)	RATED CURRENT (mA)
CMBA422SG102U	1.0+50%/-30%	70 typ	140 typ	700

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

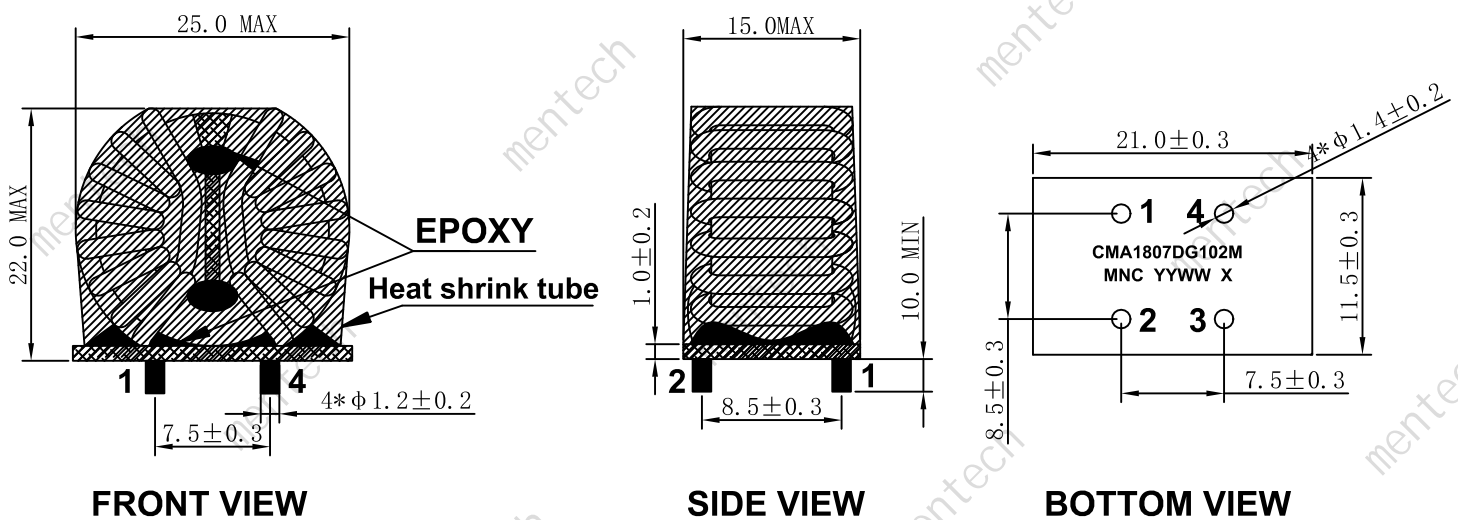


- High impedance to minimize common mode noise.
- AEC-Q200 in progress.
- Termination finished: Sn99.3-0.7Cu.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C
- Welding Temperature: 260° C



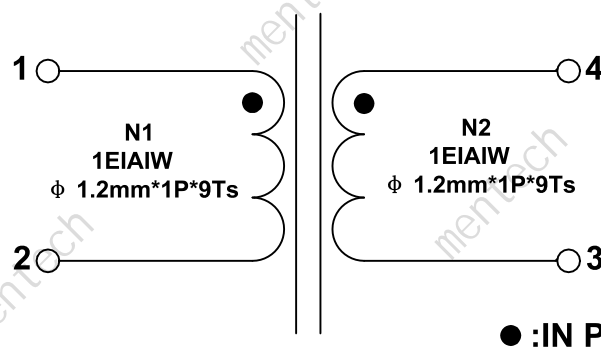
Electrical Specifications @ 25°C								
Part Number	OCL(uH) @1.0KHz,0.3V	Rate Current (A Max)	Turns(TS)	DCR mΩ max		HI-POT (VAC,60HZ,3S,1mA)		
CMA1807DG102M	N1(1-2)=N2(4-3)	15	N1(1-2)=N2(4-3)	1-2	4-3	1,2-4,3	1,2-Core	4,3-Core
	800uH MIN		9.0(ref)	6.0	6.0	1500	600	600

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



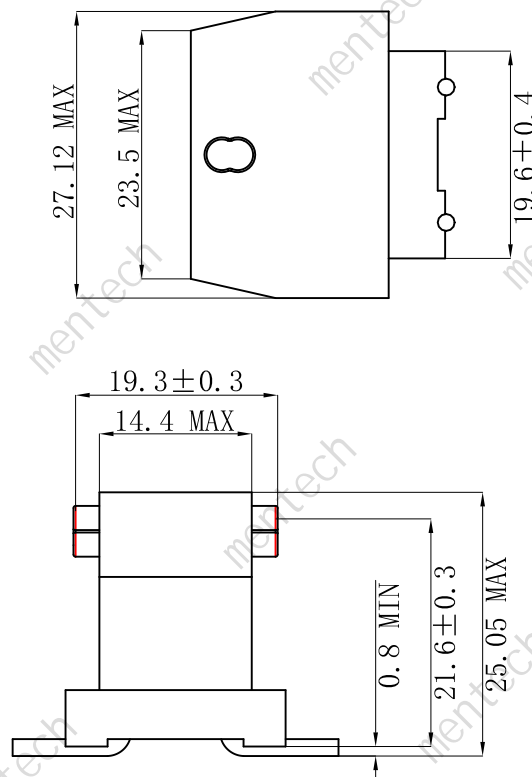
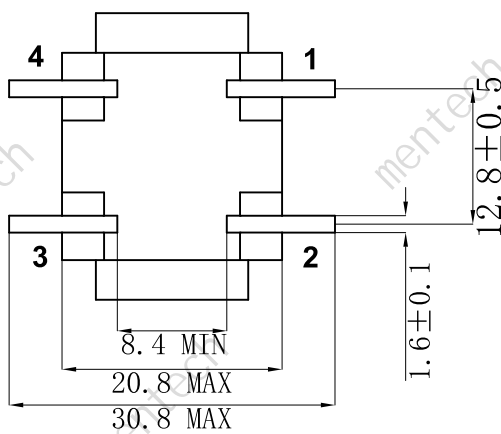
● :IN PHASE(START POINT)

- IEC62368-1 Compliancy.
- RoHS Compliance.
- Operate temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +125°C
- AEC-Q200 to be qualified.



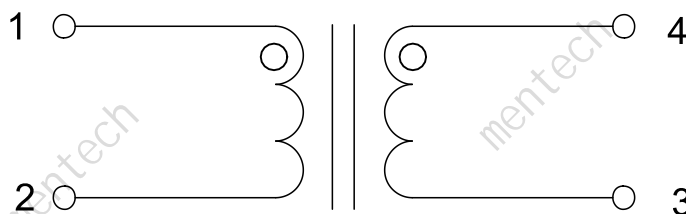
Electrical Specifications @ 25°C			
Part Number	OCL(μH Min) 1KHz,1V	DCR (mΩ Max)	Hi-Pot (2mA,2s)
		1-2,4-3	1-2,4-3
CMBA1407SG300U	30	9	AC 2400V

MECHANICAL

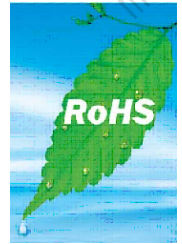


Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



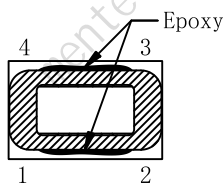
- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



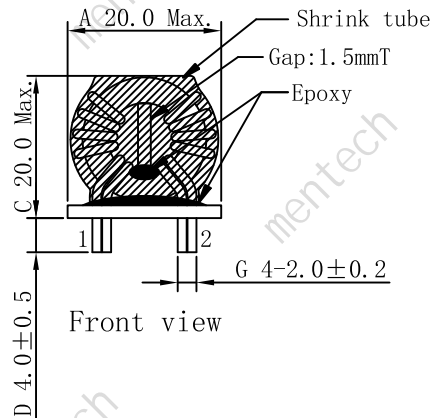
Electrical Specifications @ 25°C

Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	@1kHz/1V	@1kHz/1V	@1kHz/1V	@20kHz/1.0V	@20°C		AC1.2kV/50Hz/1mA/60S	500V/60S
CMBA1409DG400N	1-4	2-3	1-4 (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	39.7+50%/-30% (41.5Typ.)		0.25 Min.	1:1	1.2 Max. (0.85Typ.)		No breakdown, no arc	1000MΩ Min.

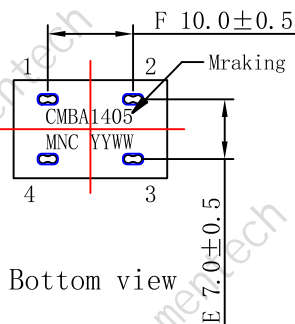
MECHANICAL



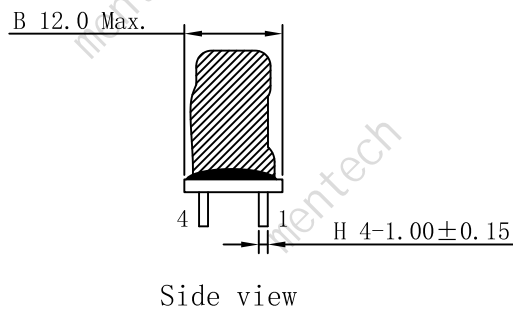
Top view



Front view



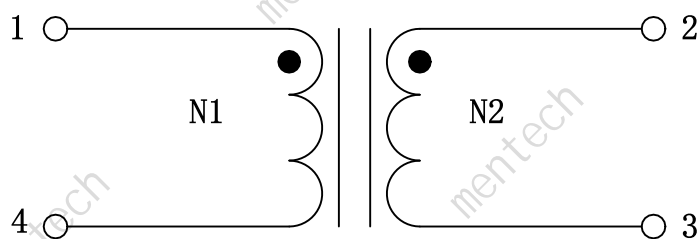
Bottom view



Side view

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



● : In phas

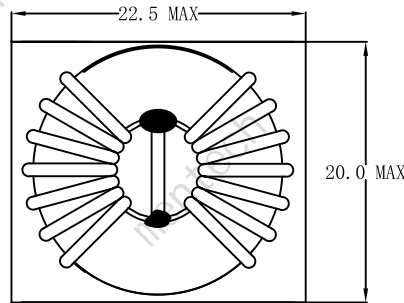
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



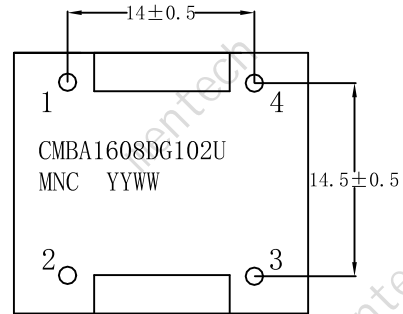
Electrical Specifications @25°C

Part Number	OCL @10KHz, 0.3V	DCR (mΩ MAX)	Turns Ratio	Hi-Pot 1mA/3S	Z(0.3V)						
	1-4=2-3	1-2=4-3	N1:N2	N1:N2	1-2=3-4						
CMBA1608DG102U	2.0+50%/-30%	4	7:7±0.4	2.6KVAC	1KHz 12 Ω MIN	2KHz 24 Ω MIN	5KHz 48 Ω MIN	10KHz 88 Ω MIN	20KHz 148 Ω MIN	50KHz 244 Ω MIN	100KHz 305 Ω MIN

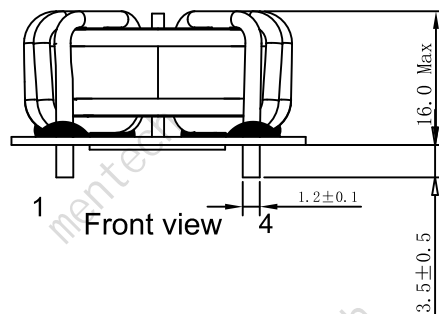
MECHANICAL



Top view



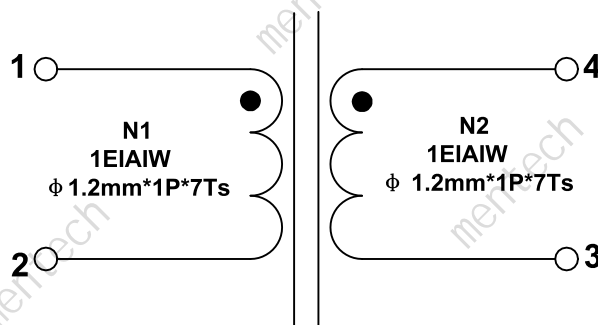
Bottom view



Front view

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

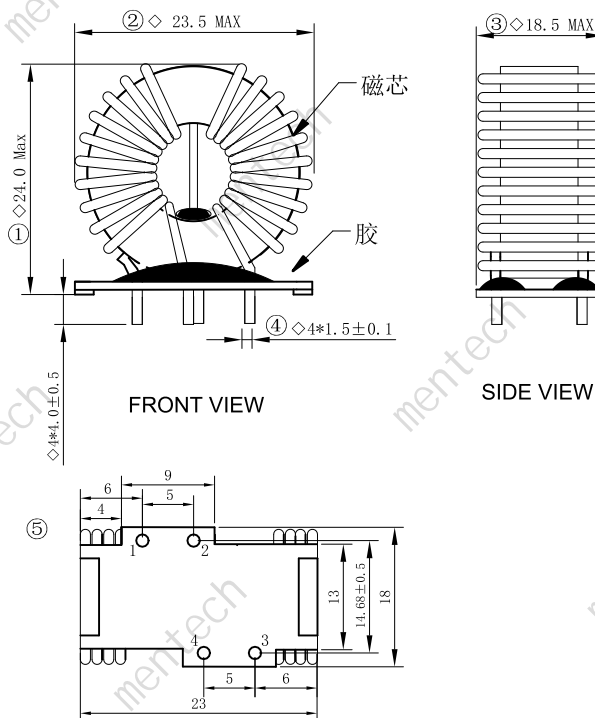


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



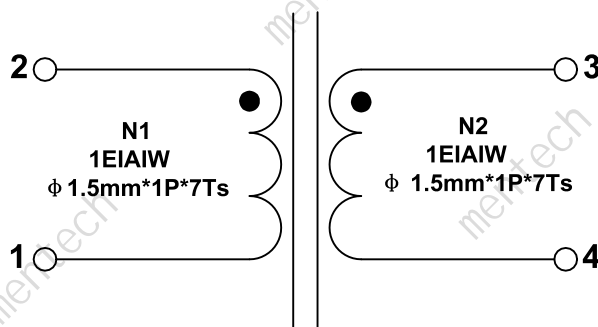
Electrical Specifications @25°C					
Part Number	OCL @10KHz, 0. 25V	DCR (mΩ MAX)	Turns Ratio	Irms (A MAX)	HI-POT
		1-2=3-4	1-2=4-3	N1:N2	
CMBA1712DG102U	1mH MIN (1. 5mH±30%TYP)	4	2*7TS	16	2000VAC 0. 5mA 3S

MECHANICAL

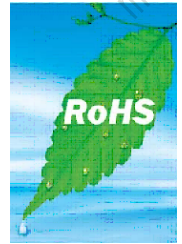


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

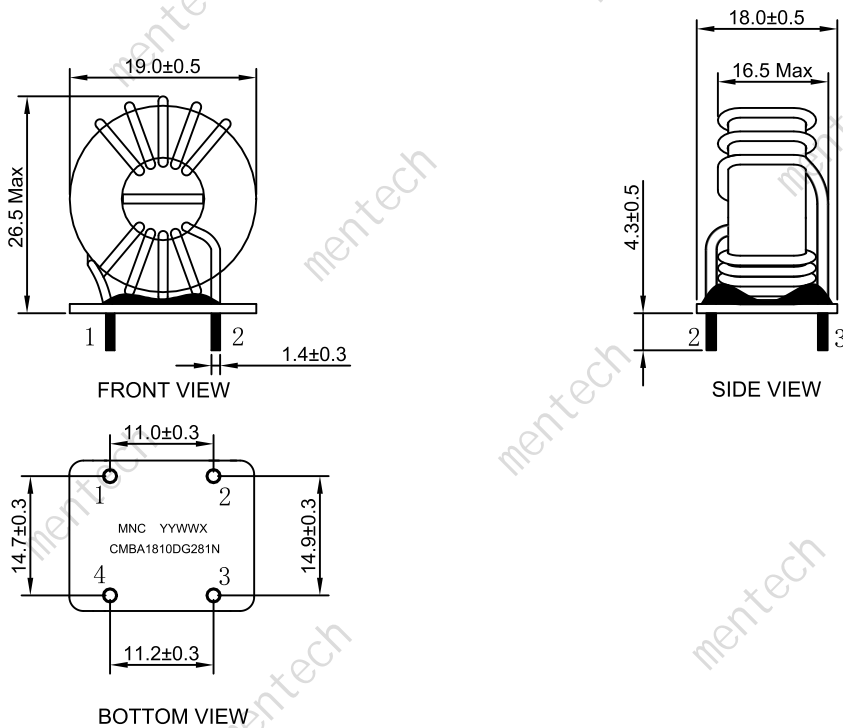


- AEC-Q200 qualified
- Controller area network (CAN)
- Ethernet architectures
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



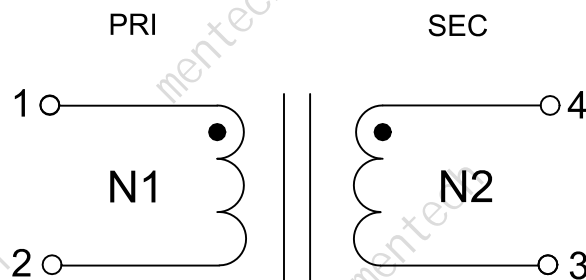
Part Number	Electrical Specifications @ 25°C				
	Turns Ratio (±0.5TS)	OCL(μH) @1KHz,0.25V	DCR (mΩ MAX)	ACR (Ω MAX) @1KHz,0.25V	HI-POT @3S,5mA,50Hz
CMBA1810DG281N	5:5	280+30%/-20%	10.0	4.0	Winding-Core 2500VAC

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



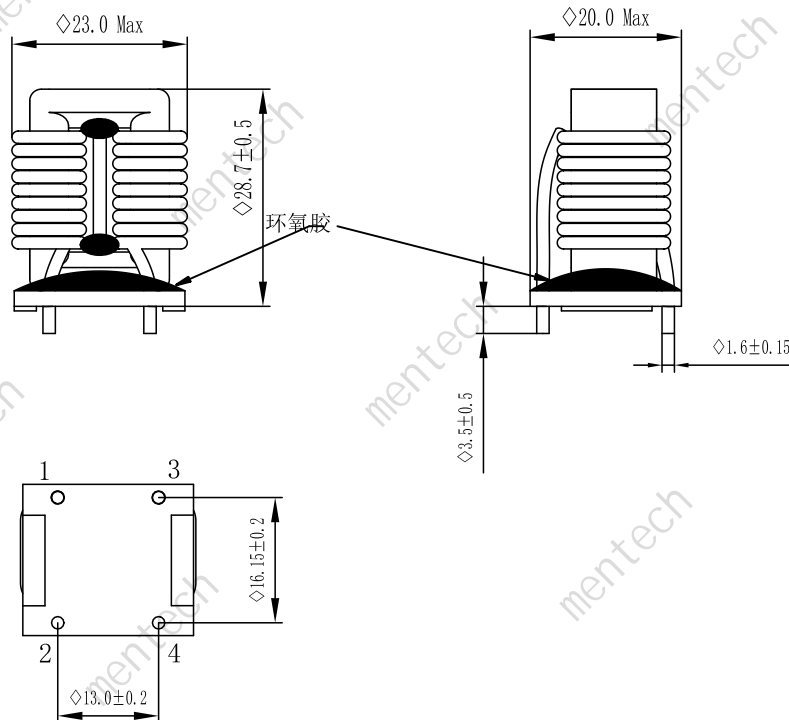
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



Electrical Specifications @25°C

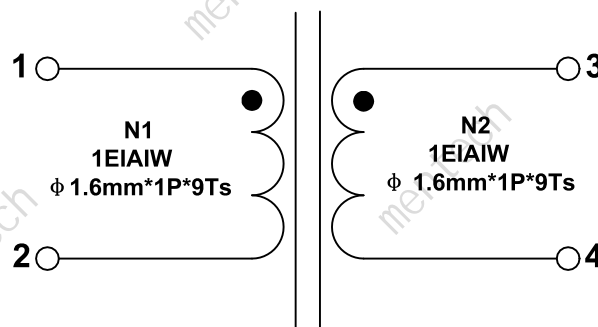
Part Number	OCL (mH) @10KHz, 0.1V	DCR (mΩ MAX)	Turns Ratio (20KHz, 1V)	HI-POT	Z (0.1V)		IR
	1-2=3-4	1-2=4-3	N1:N2	N1:N2	1-2=3-4		COIL-COIL
CMBA1811DG551V	0.55±25%	4.2	9:9±0.3	2.0KVAC 1mA 60S OR 2.4KVAC 1mA 3S	100KHz 250 Ω MIN	1MHz 1.5K Ω MIN	1.0KVDC 60S ≥100MΩ

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



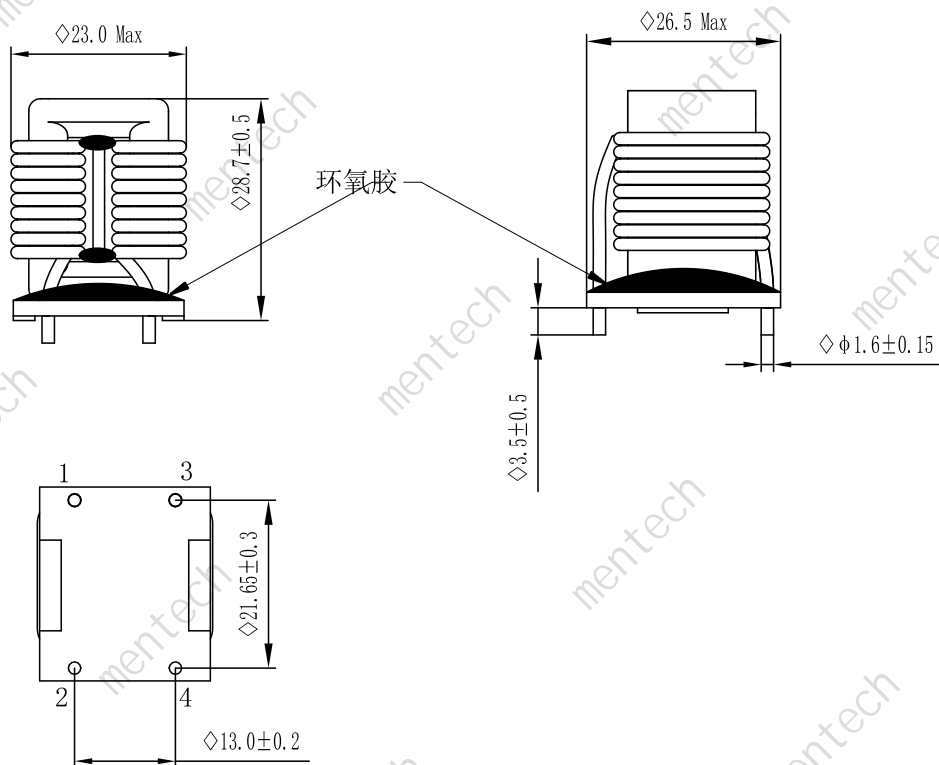
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



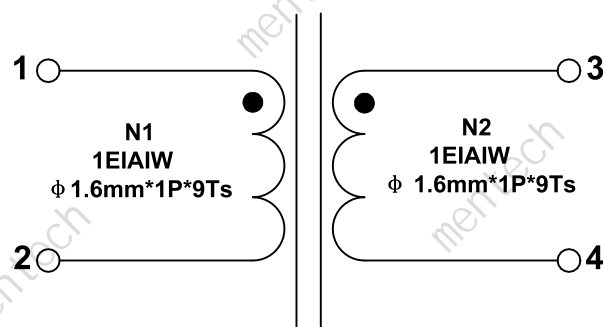
Electrical Specifications @25°C

Part Number	OCL (mH) @10KHz, 0.1V	DCR (mΩ MAX)	Turns Ratio (20KHz, 1V)	HI-POT	Z(0.1V)		IR
	1-2=3-4	1-2=4-3	N1:N2	N1:N2	1-2=3-4	COIL-COIL	
CMBA1817DG851V	0.85±25%	5	9:9±0.3	2.0KVAC 1mA 60S OR 2.4KVAC 1mA 3S	100KHz 350 Ω MIN	1MHz 2.5K Ω MIN	1.0KVDC 60S ≥100MΩ

MECHANICAL



SCHEMATICS



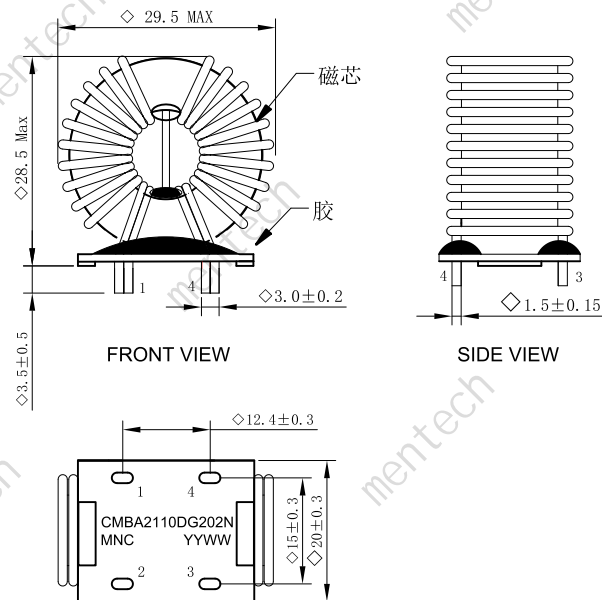
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



Electrical Specifications @25°C

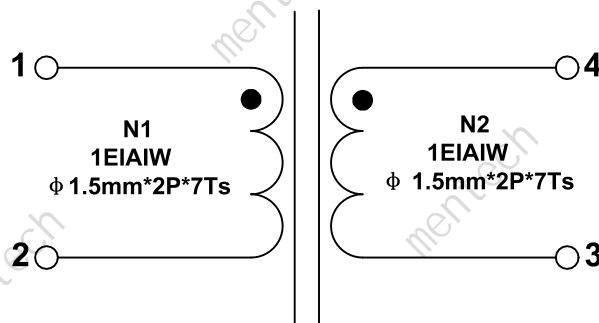
Part Number	Turns Ratio (20KHz, 1V)	OCL (mH) @10KHz, 0.1V	DCR (mΩ MAX)	HI-POT	Z (0.1V)		IR
	N1:N2	1-2=3-4	1-2=4-3	N1:N2	1-2=3-4		N1:N2
CMBA2110DG202N	7:7±0.4	2.0±30%	1.8	2.0KVAC 1mA 60S OR 2.4KVAC 1mA 3S	100KHz 350 Ω MIN	1MHz 800 Ω MIN	1.0KVDC 60S ≥100MΩ

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



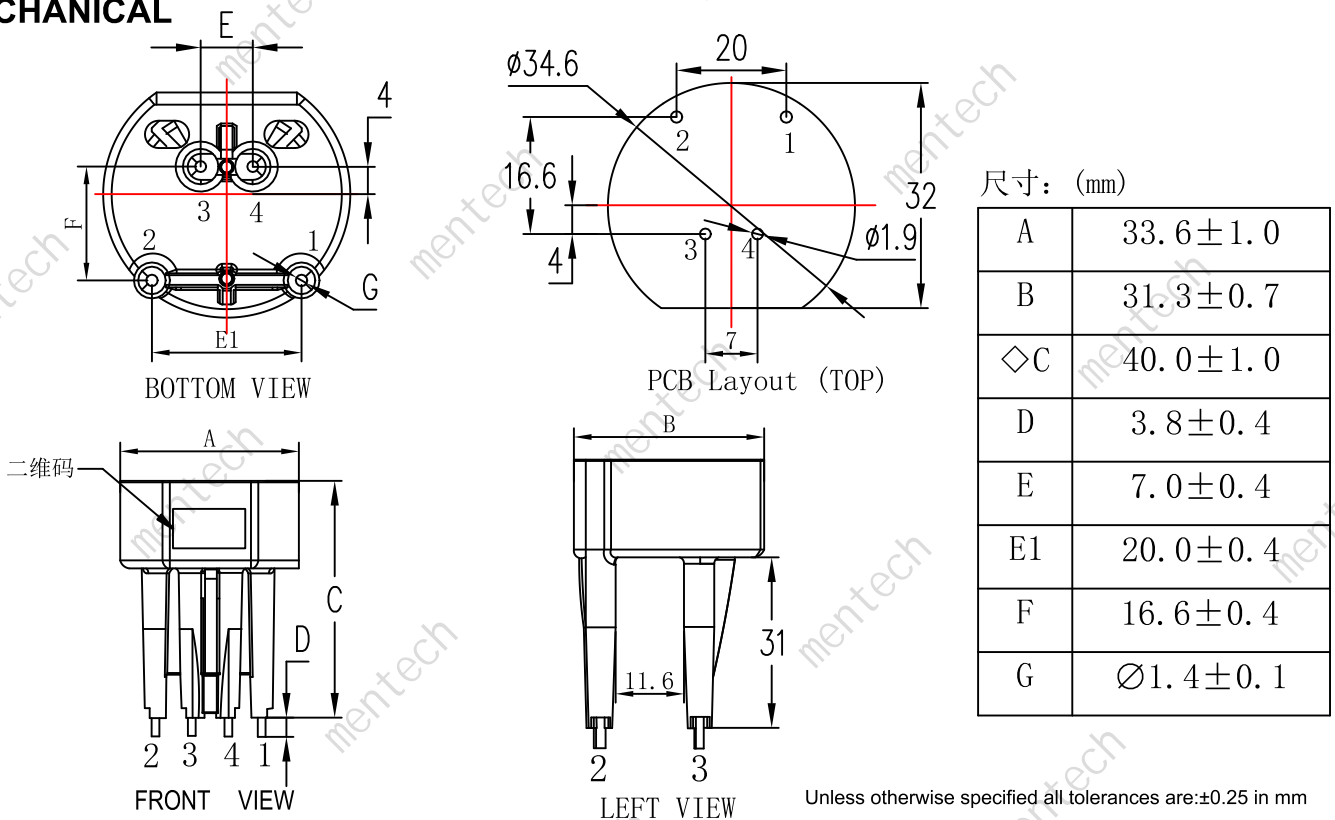
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



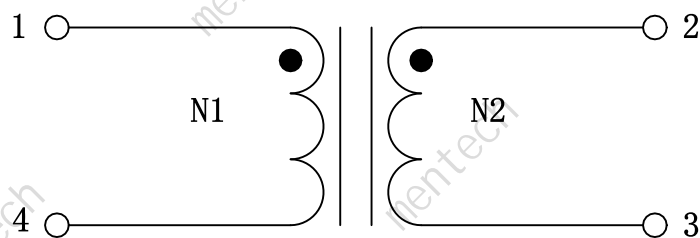
Electrical Specifications @25°C

Part Number	Turns Ratio (20KHz, 1V)	OCL (mH MIN) @10KHz, 0.1V	OCL (mH) @100KHz, 1.0V	ΔOCL (μH MAX) @100KHz, 1.0V	LK (μH) @100KHz, 1.0V 1-4 (short others)	DCR (mΩ MAX)	HI-POT	IR
	1-4:2-3	1-4=2-3	1-4=2-3	L1-4-L2-3		1-4=2-3	coil-coil	coil-coil
CMBA2110DG242UB	10:10±3%	2.4	1.7+45%/-35%	110	3.4~5.2	6.5	1500VAC 1mA 60S	500VDC 5S ≥100MΩ

MECHANICAL

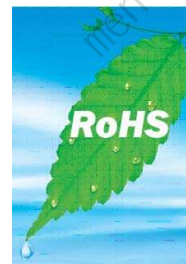


SCHEMATICS



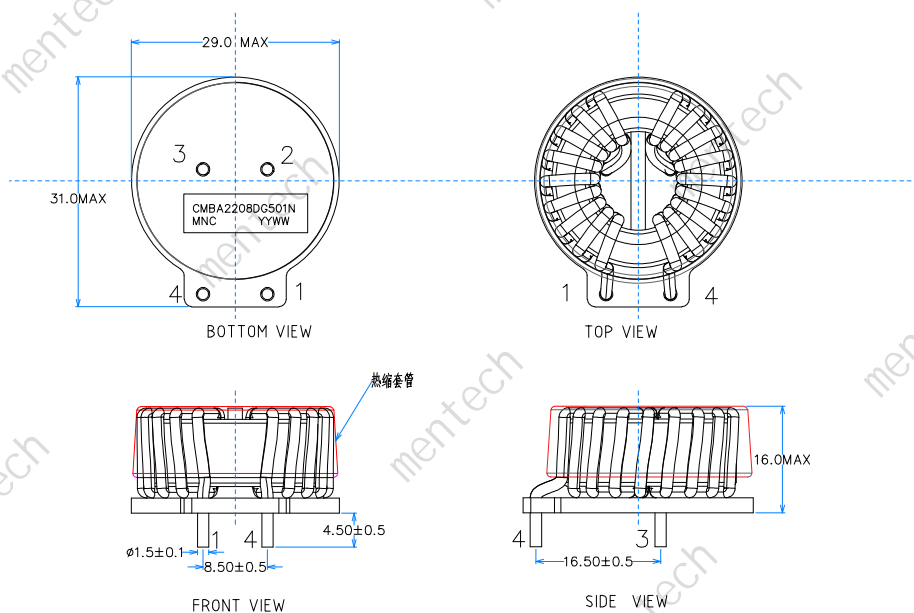
● : In phas

- RoHS Compliant (RoHS6).
- IEC62368-1 Compliant.
- Operating temperature range: -40°C to +125°C (including self-temperature rise)
- AEC-Q200 to be qualified.



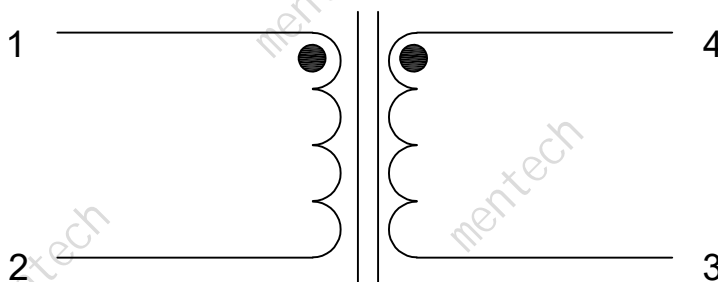
Electrical Specifications @25°C							
Part Number	Turns Ratio @20KHz,0.1V	OCL @100KHz,1V	Rated Current	DCR (mΩ Max)		HI-POT (VAC,1mA,60Sec)	
	1-2-4-3	1-2=4-3	1-2=4-3	1-2	4-3	(1-2) TO (4-3)	WINDING TO CORE
CMBA2208DG501N	1:1±5%	379uH -35+50%	16A	6	6	1000	1000

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

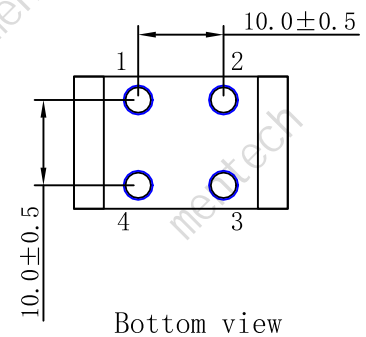
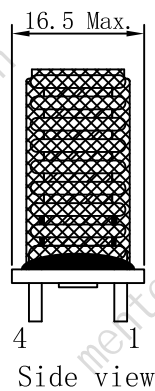
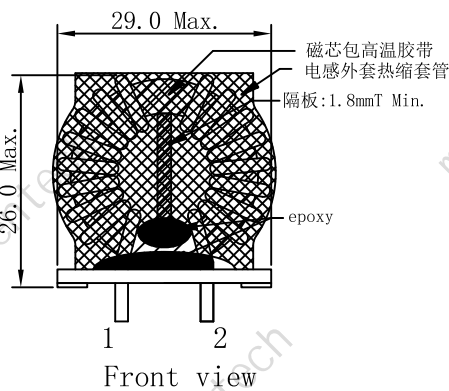




- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C

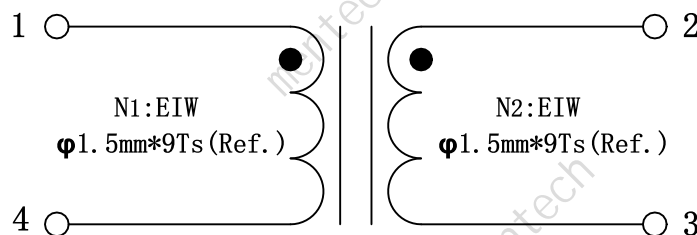
Electrical Specifications @ 25°C							
Part Number	L(uH)		Turns Ratio	DCR(mΩ)		HI-POT	IR
	1-4	2-3	@20kHz/1.0V	1-4	2-3	AC1.5kV/50Hz/1mA/60S	500V/60S
CMB2208DG581N	583.2±35%		1:1	6.0 Max.		No breakdown, no arc	100MΩ Min.

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



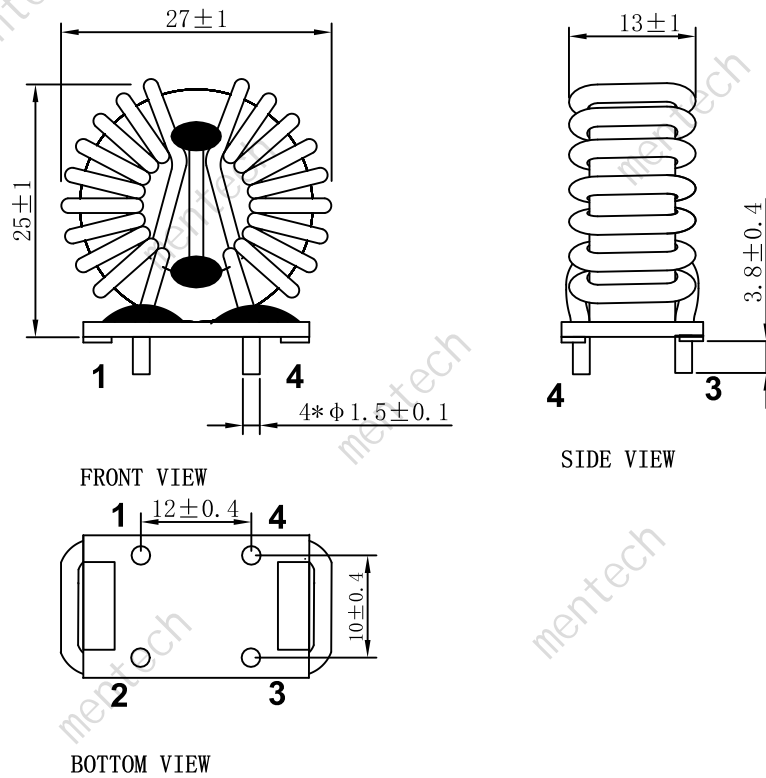
● : In phase

- RoHS Compliant.
- High impedance to minimize common mode noise.
- AEC-Q200 qualified .
- Operating temperature range (Including self temperature rise): -40°C to +125°C.
- Storage temperature range : -40°C to +125°C.



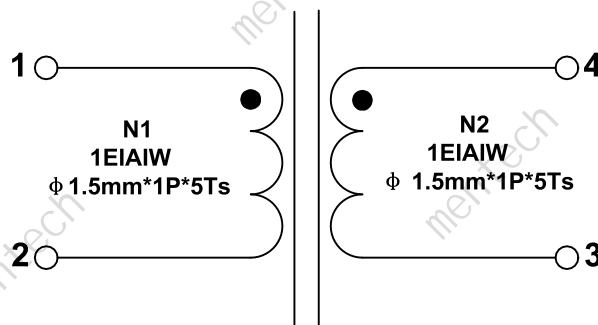
Electrical Specifications @25°C				
Part Number	Turns Ratio	Z (Ω MIN) 100MHz, 0.1V	DCR (mΩ MAX)	HI-POT
		1-2=3-4	1-2=3-4	WINDING-WINDING
CMBA2208DG701U	2*5TS	700	4.0	2000VAC 1mA 3S

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

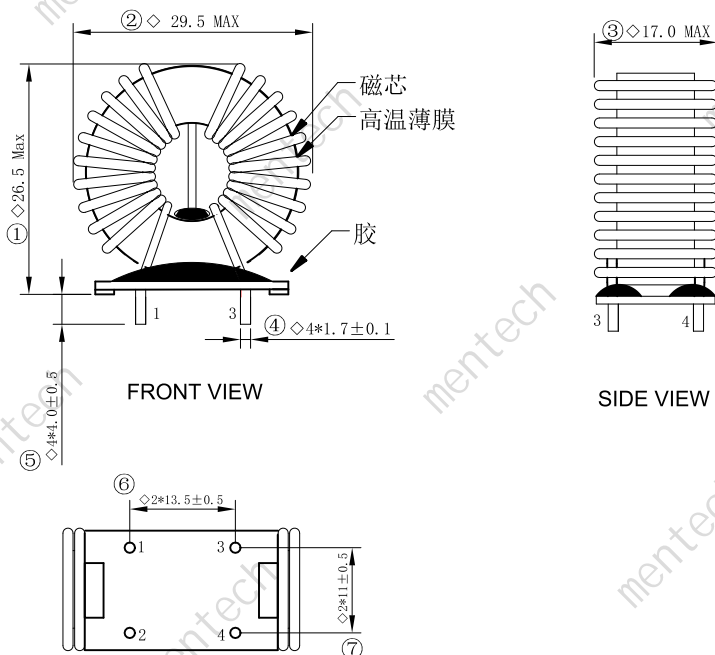


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



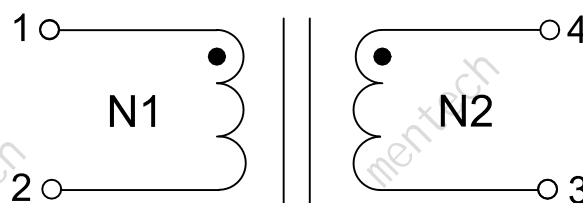
Electrical Specifications @25°C						
Part Number	Turns Ratio	OCL (mH MIN) @1KHz, 0. 25V	DCR (mΩ MAX)	Z (Ω MIN) @100KHz, 0. 1V, 25°C	Z (K Ω MIN) @1MHz, 0. 1V, 25°C	HI-POT
	1-2:3-4	1-2=3-4	1-2=3-4	1-2=3-4	1-2=3-4	N1:N2
CMBA2210DG761N	11:11±0.3	0.76±35%	6	300	1.5	1.5KVAC 1mA 60S OR 1.8KVAC 1mA 3S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



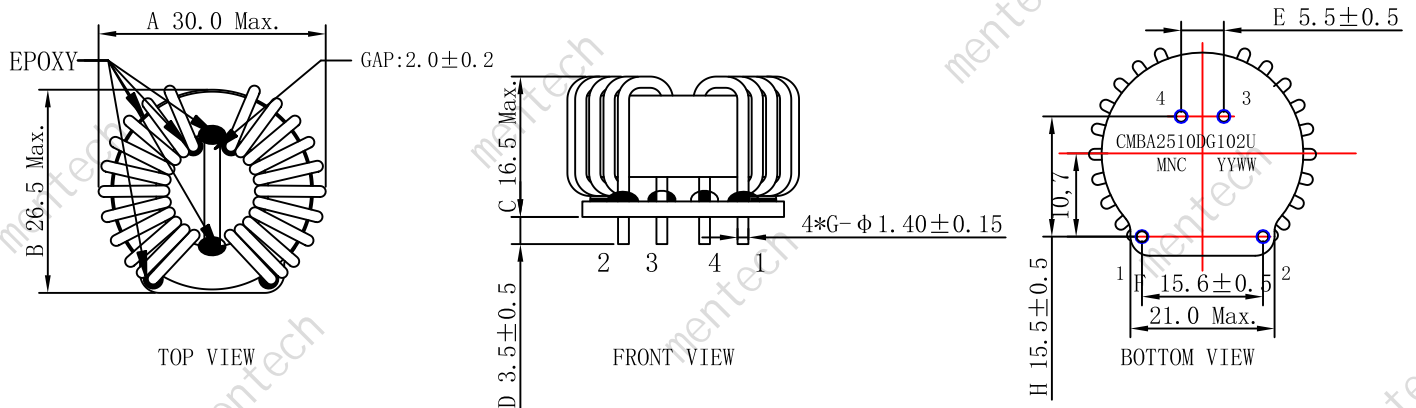
- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



Electrical Specifications @ 25°C

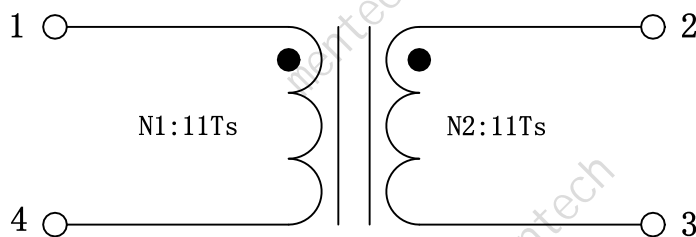
Part Number	L(mH) @1kHz/1V		Lk(uH) @1kHz/1V	Turns Ratio @20kHz/1.0V	DCR(mΩ) @20°C		HI-POT	IR
	1-4	2-3	1-4 (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
CMBA2510DG102U	1.0 Min. (1.1Typ.)		5.0Min. (6.5Typ.)	1:1	5.78 Max. (4.6 Typ.)		No breakdown, no arc	500V/60S 1000MΩ Min.

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



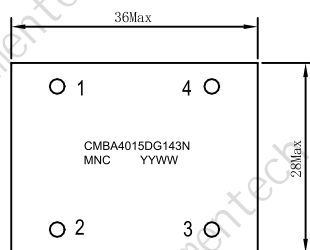
●:同相位脚

- RoHS Compliant (RoHS6).
- IEC62368-1 Compliant.
- Operating temperature range: -40°C to +125°C (including self-temperature rise)
- AEC-Q200 to be qualified.

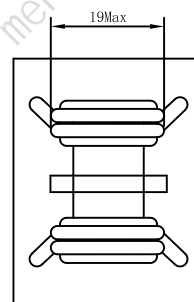


Electrical Specifications @ 25°C					
Part Number	Turns Ratio @20KHz,0.1V	OCL(uH) @1KHz,1V	DCR (mΩ Max)		HI-POT (VAC,1mA,60Sec)
		1-2:4-3	1-2=4-3	1-2	4-3
CMBA2510DG201N	1:1±5%	200±30%	3.6	3.6	1500

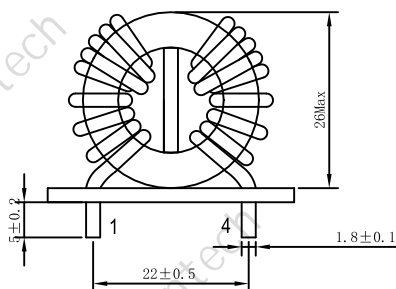
MECHANICAL



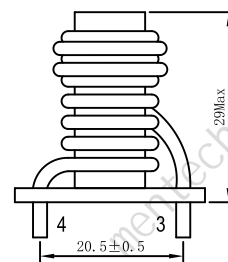
BOTTOM VIEW



TOP VIEW



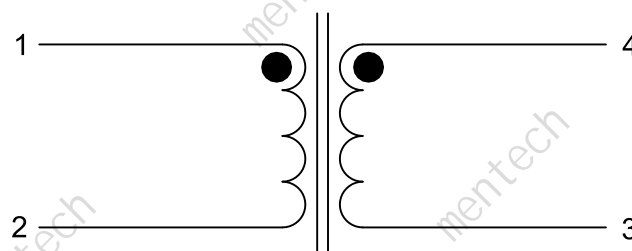
FRONT VIEW



SIDE VIEW

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



● In Phase

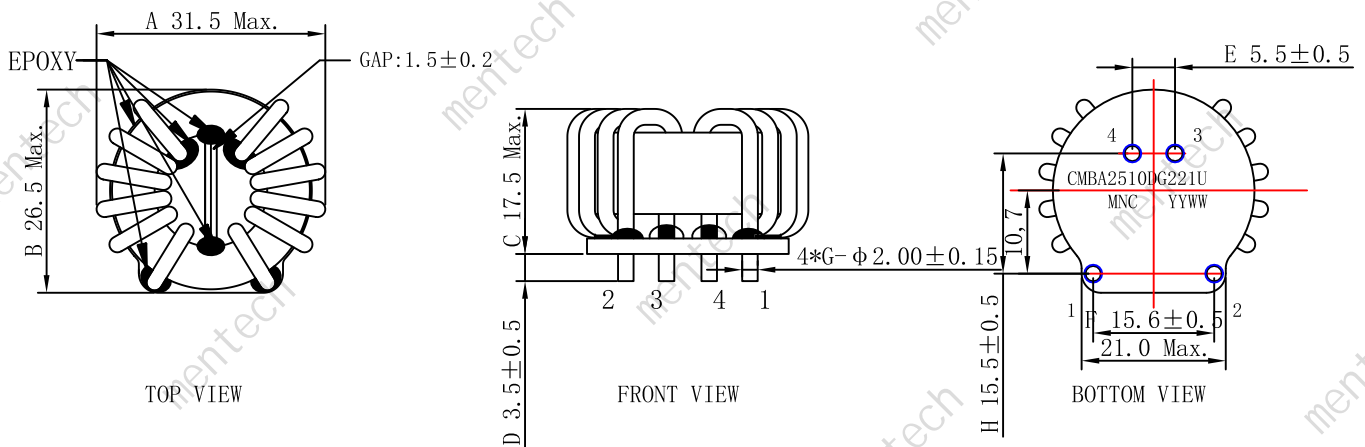
- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



Electrical Specifications @ 25°C

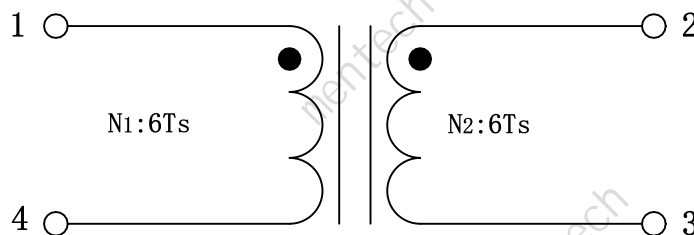
Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	@1kHz/1V	@1kHz/1V	@1kHz/1V	@20kHz/1.0V	@20°C	@20°C	AC1.2kV/50Hz/1mA/60S	500V/60S
CMBA2510DG221U	1-4	2-3	1-4 (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	220 (335Typ.)		1.5 Min. (2.1Typ.)	1:1	3.0 Max. (2.1 Typ.)		No breakdown, no arc	

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



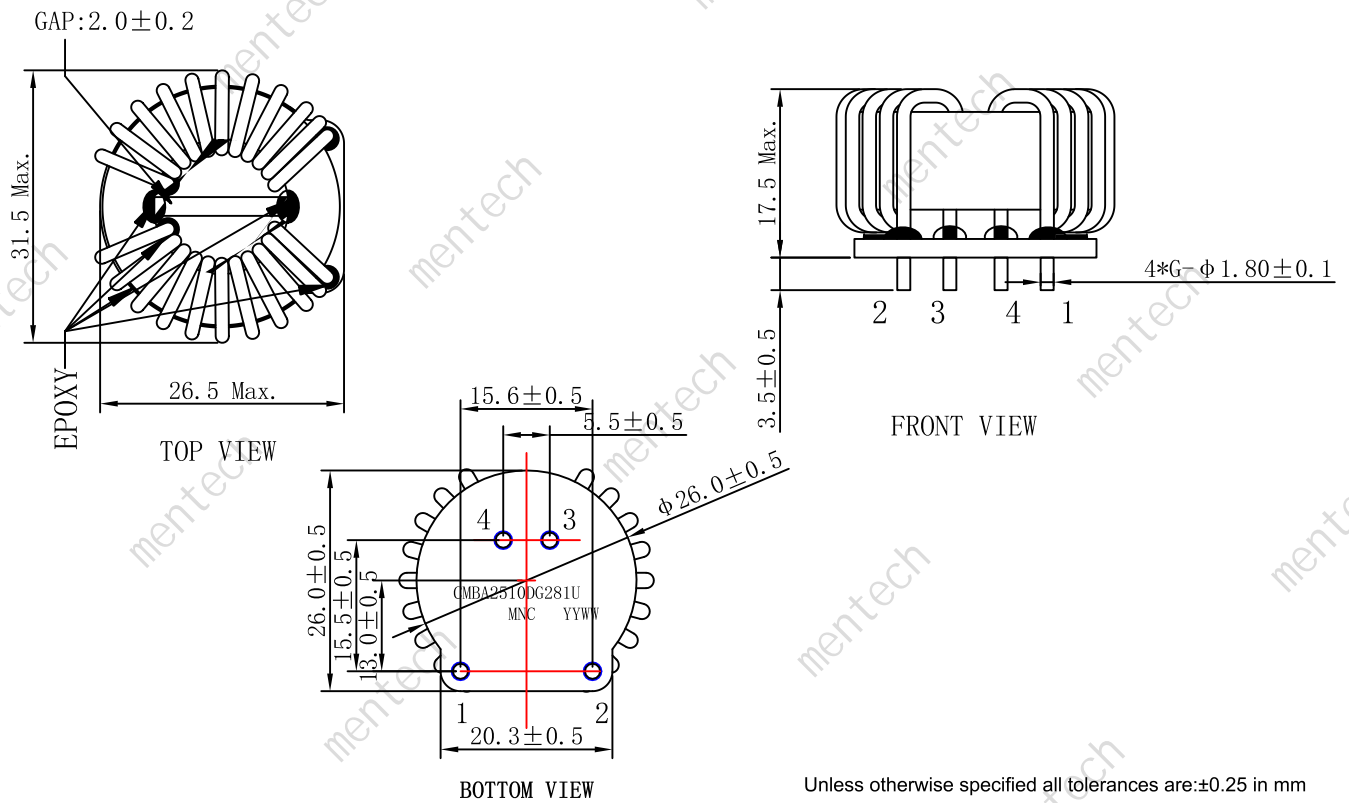
● : 同相位脚

- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil soft temperature rise)
- Storage temperature range: -40°C TO 125°C



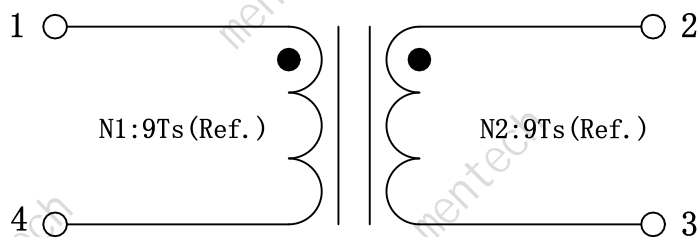
Electrical Specifications @ 25°C								
Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	@1kHz/1V		@1kHz/1V	@20kHz/1.0V	@20°C		AC1.2kV/50Hz/1mA/60S	500V/60S
CMBA2510DG281U	1-4	2-3	¹⁻⁴ (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	280.0 Min.		2.8Min.	1:1	3.3 Max.		No breakdown, no arc	1000MΩ Min.

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



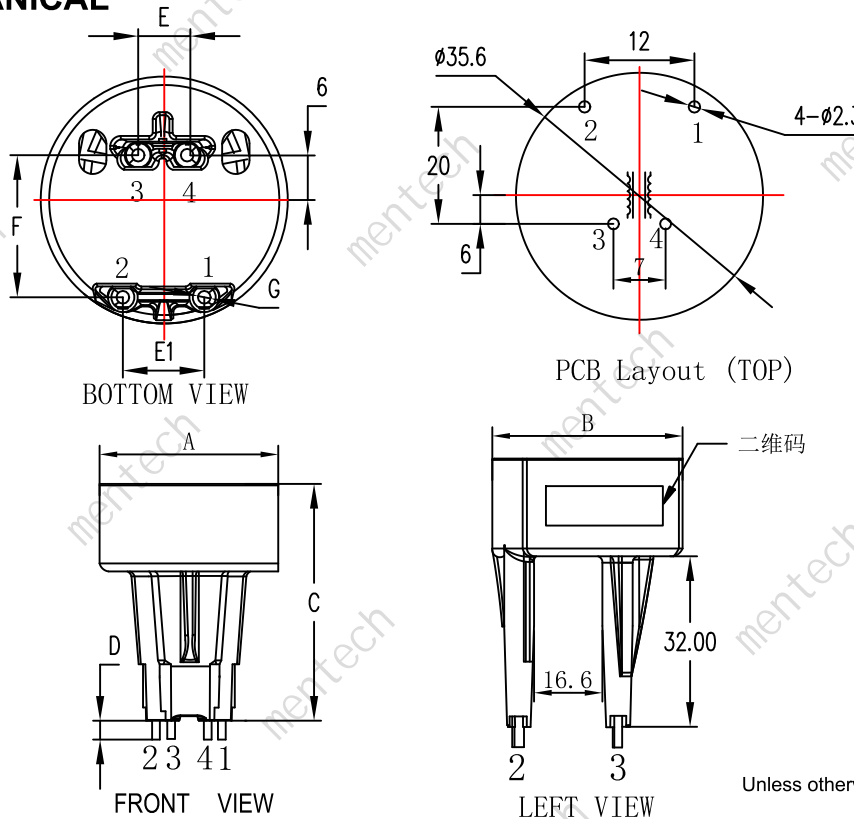
● :In phase

- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



Electrical Specifications @25°C						
Part Number	Turns 20KHz, 1.0V	OCL (μH MIN) @100KHz, 1.0V	OCL (μH MAX) @100KHz, 1.0V	DCR (mΩ MAX)	IR	HI-POT
		1-4:2-3	1-4=2-3	L1-4-L2-3	1-4=2-3	COIL-COIL
CMBA2513DG331UA	6:6±0.3	330	9	6	500VDC 100MΩ 5S	1.5KVAC 1mA 60S

MECHANICAL

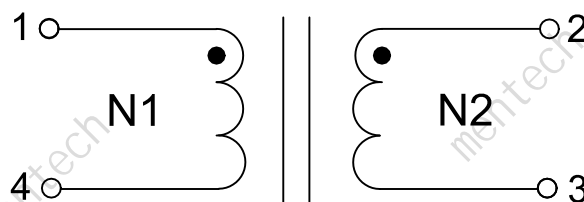


尺寸: (mm)

A	34.6 ± 1.0
B	34.6 ± 1.0
◇C	52.5 ± 1.0
D	3.8 ± 0.4
E	7.0 ± 0.4
E1	12.0 ± 0.4
F	20.0 ± 0.4
G	∅1.8 ± 0.1

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

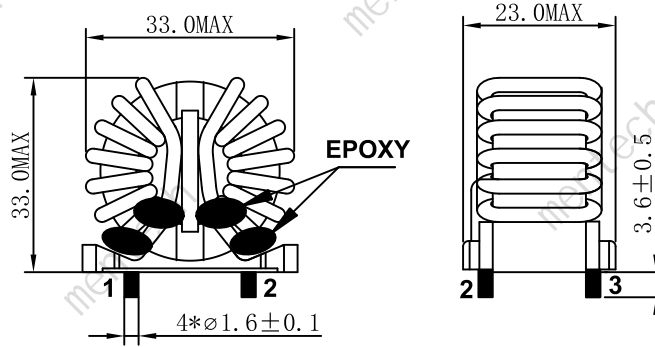


- High impedance to minimize common mode noise.
- AEC-Q200 in progress.
- Termination finished : Sn99.3-0.7Cu.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



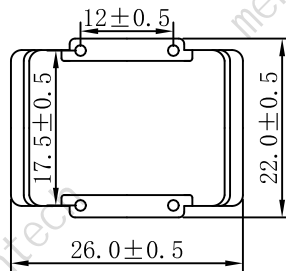
Electrical Specifications @ 25°C						
Part Number	OCL(uH) @1.0KHz,1.0V	LK(uH) @1.0KHz,1.0V: PIN2-3 SHORTED	Turns(TS)	DCR mΩ max		HI-POT (VAC,3S,1mA)
CMBA2513DG601U	N1(1-4)=N2(2-3)	N1(1-4)	N1=N2	1-4	2-3	1,4-2,3
	600uH MIN	4.0uH±20%	9.0	5.0	5.0	3000

MECHANICAL

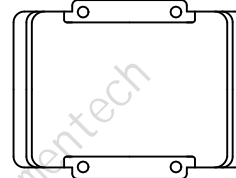


FRONT VIEW

SIDE VIEW



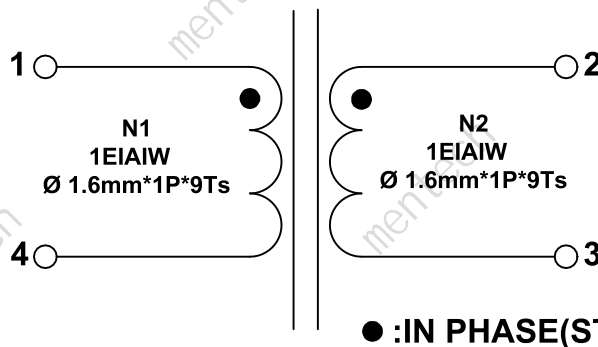
BOTTOM VIEW



SUGGESTED PAD LAYOUT

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



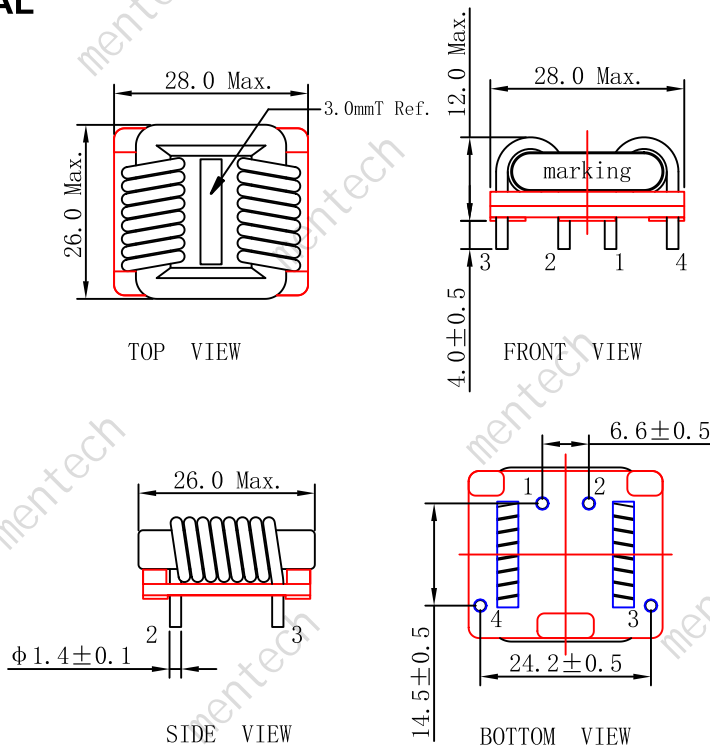
● :IN PHASE(START POINT)

- RoHS Compliant.
- Termination finished:TIN.
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



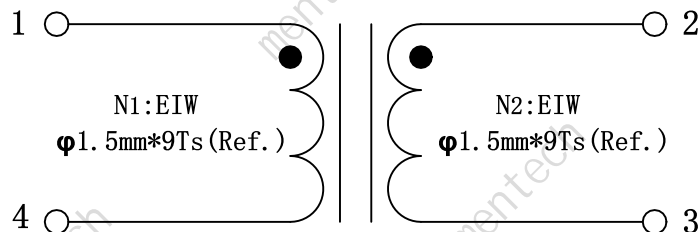
Electrical Specifications @25°C						
Part Number	Turns Ratio @20KHz, 1.0V	OCL(μH MIN) @1KHz, 1V	DCR (mΩ MAX)	LK(μH REF) @1KHz, 1V	IR	HI-POT
	N1:N2	1-4=2-3	1-4=2-3	1-4 (Short others)	N1:N2	N1:N2
CMBA2521DG121U	1:1±3%	122.0	1.4	1.8	100MΩ 500V 60S	1.8kVAC 50Hz 1mA 60S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



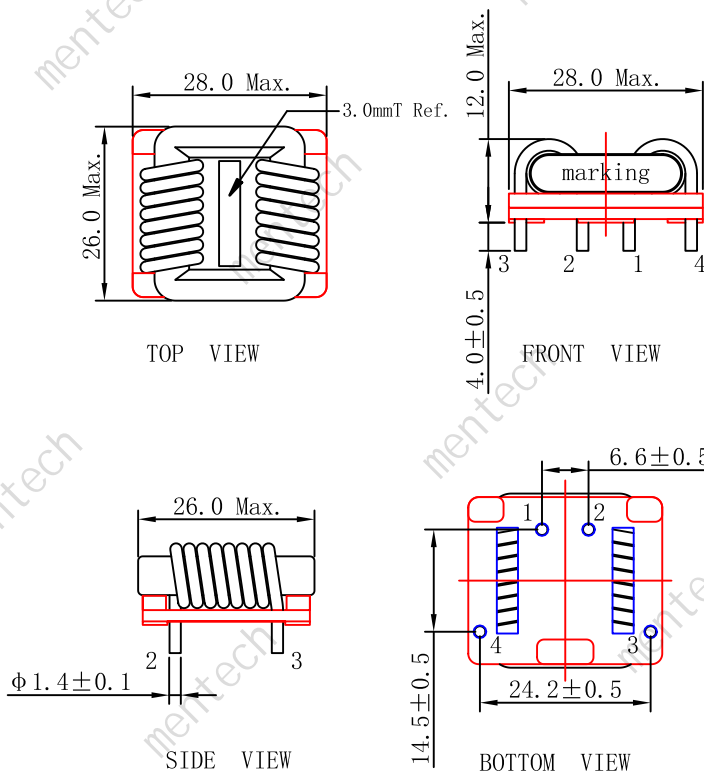
● : In phase

- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil soft temperature rise)
- Storage temperature range: -40°C TO 125°C



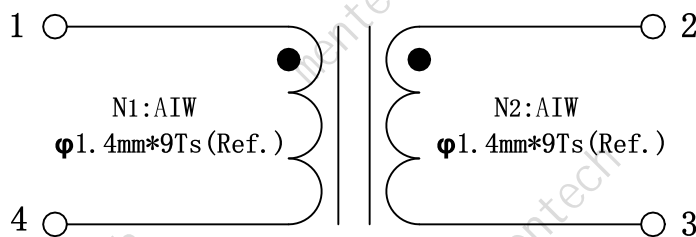
Electrical Specifications @ 25°C								
Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	1-4	2-3	@1kHz/1V	@20kHz/1.0V	@20°C		AC1.8kV/50Hz/1mA/60S	500V/60S
CMBA2521DG221U	1-4		1-4 (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	220.0 Min.		4.8 Ref.	1:1	3.8 Max.		No breakdown, no arc	100MΩ Min.

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



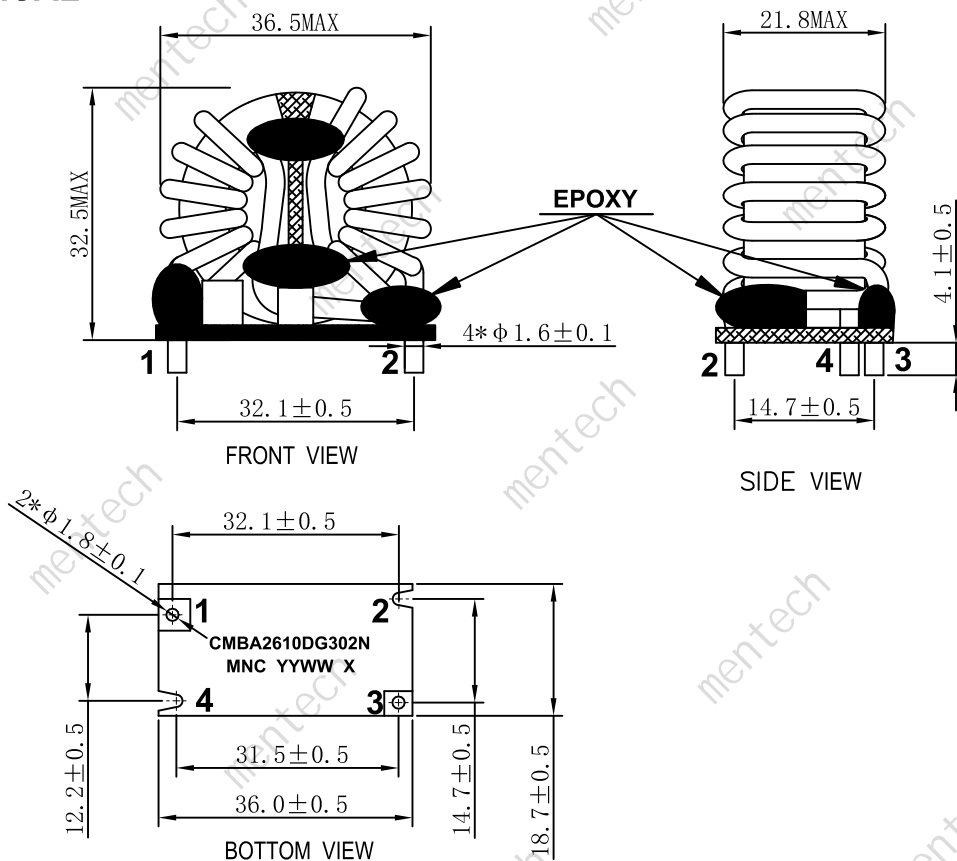
● : In phase

- High impedance to minimize common mode noise.
- AEC-Q200 in progress.
- Termination finished: Sn99.3-0.7Cu.
- Operating Temperature Range: -40°C TO 125°C(including coil soft temperature rise)
- Storage temperature range: -40°C TO 125°C
- Welding temperature : 260°C



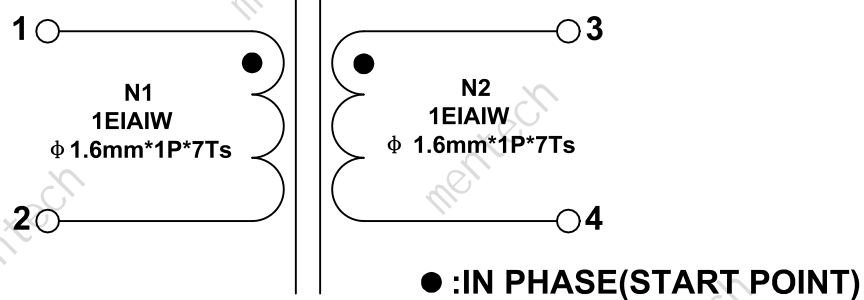
Electrical Specifications @ 25°C							
Part Number	OCL(μH) @1.0KHz,0.25V	Rate Current (A Max)	Turns(TS)	DCR mΩ max		HI-POT (VAC,3S,1mA)	
CMBA2610DG302N	N1(1-2)=N2(3-4) 3.0mH+50%/-30%	20	N1=N2 7.0(ref)	1-2 4.0	3-4 4.0	1,2-3,4 3000	1,3-Core 2000

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

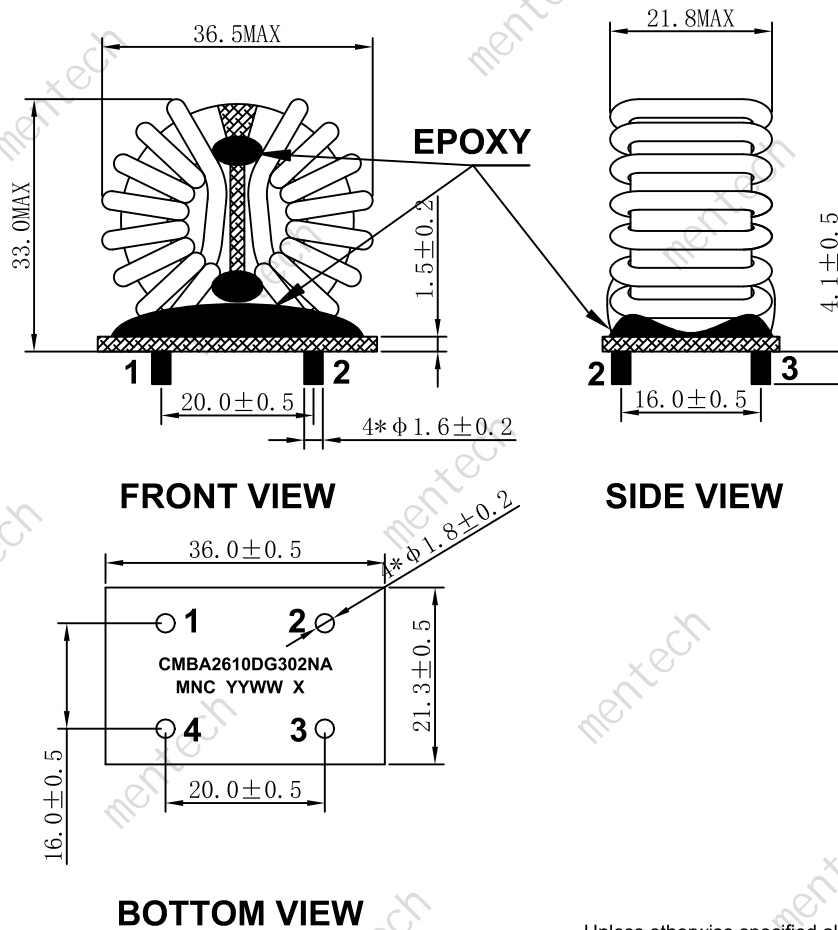


- High impedance to minimize common mode noise.
- AEC-Q200 in progress.
- Termination finished : Sn99.3-0.7Cu.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C
- Welding Temperature: 260° C



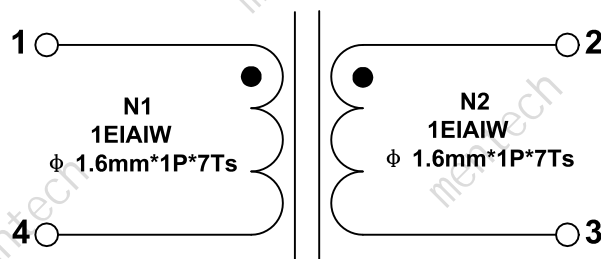
Electrical Specifications @ 25°C							
Part Number	OCL(uH) @1.0KHz,0.25V	Rate Current (A Max)	Turns(TS)	DCR mΩ max		HI-POT (VAC,3S,1mA)	
CMBA2610DG302NA	N1(1-4)=N2(2-3) 3.0mH+50%/-30%	20	N1=N2 7.0(ref)	1-4	2-3	1,4-2,3	1,2-Core 2000

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



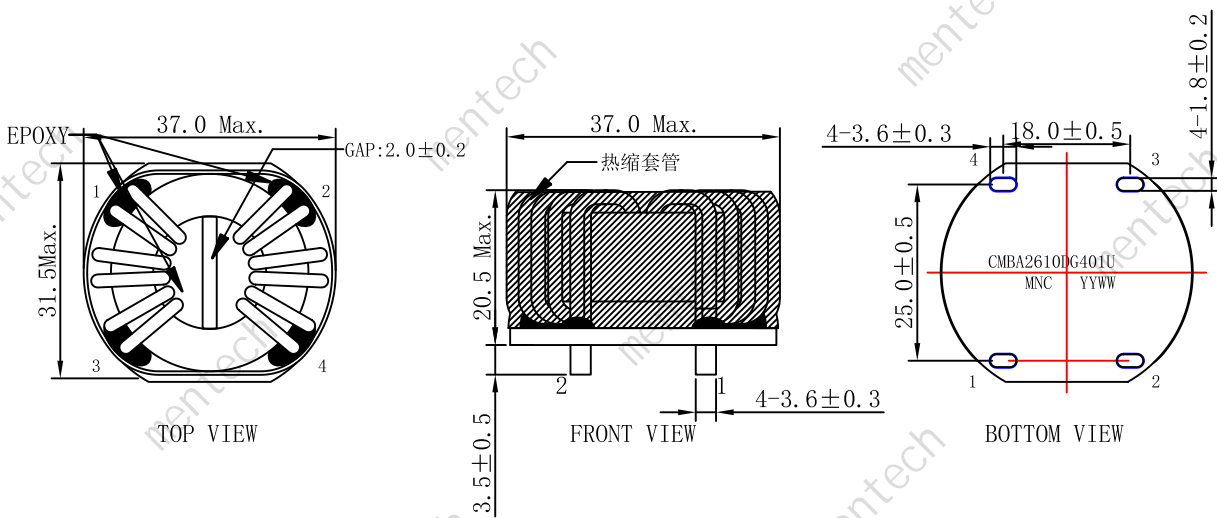
● :IN PHASE(START POINT)

- RoHS Compliant.
- Termination finished: TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



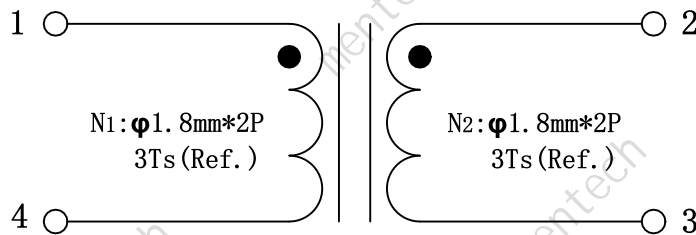
Electrical Specifications @ 25°C								
Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	@1kHz/1V		@1kHz/1V	@20kHz/1.0V	@20°C		AC1.5kV/50Hz/1mA/60S	500V/60S
CMBA2610DG401U	1-4	2-3	1-4 (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	400 (589.6Typ.)		0.4 Ref. (0.45Typ.)	1:1	0.8Max. (0.62 Typ.)		No breakdown, no arc	1000MΩ Min.

MECHANICAL



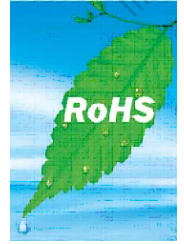
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



● : In phase

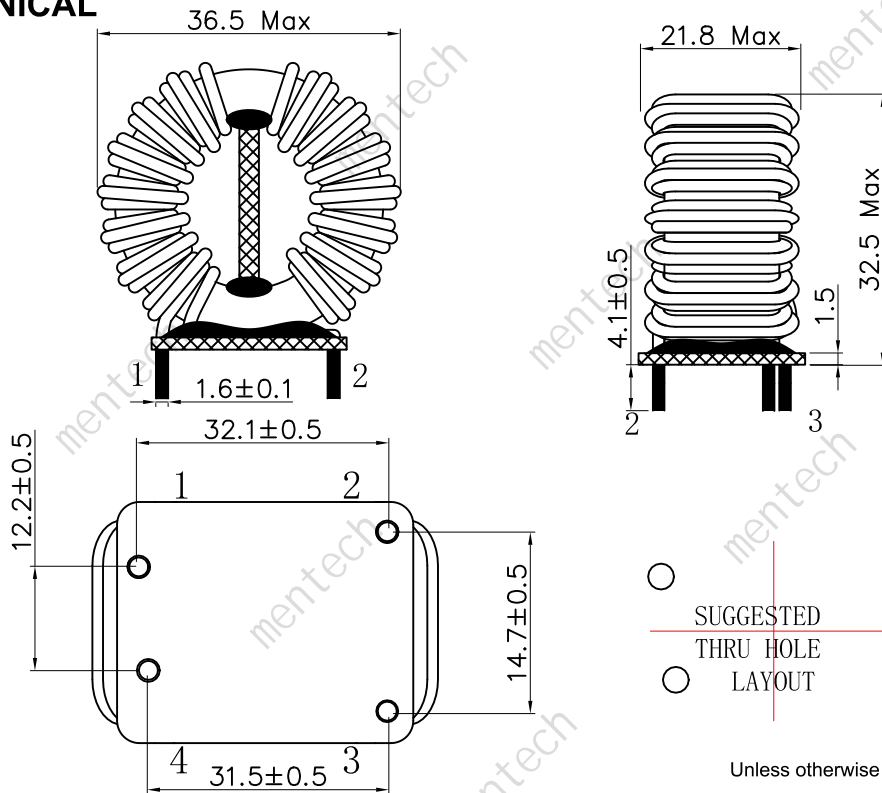
- High impedance to minimize common mode noise.
- RoHS Compliant.
- AEC-Q200 to be Qualified.
- Operating temperature range: -40°C to +125°C.
- Storage temperature range: -40°C to +125°C.



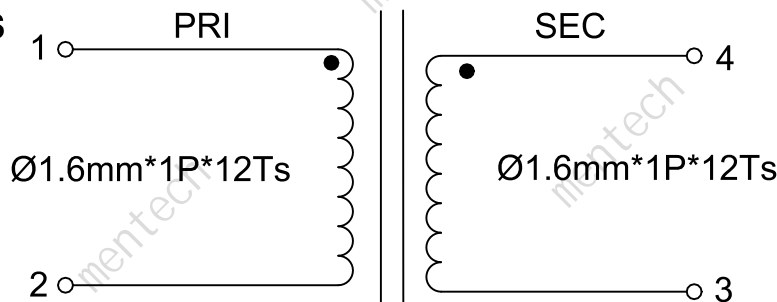
Electrical Specifications @25°C

Part Number	TurnsRatio (±3%)	OCL(mH Min) @1KHz,0.25V	DCR (mΩ Max)	R. Current (A Max)	HI-POT (0.5mA 2S 50HZ)
		1-2:4-3	1-2=4-3	1-4=2-3	20
CMBA2610DG802U	1:1	8.0	6.5	2600VAC	

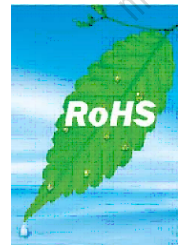
MECHANICAL



SCHEMATICS

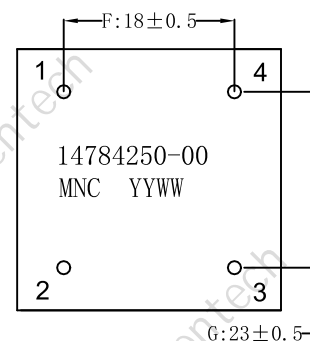
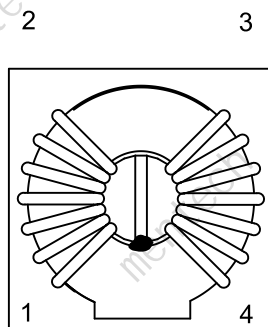
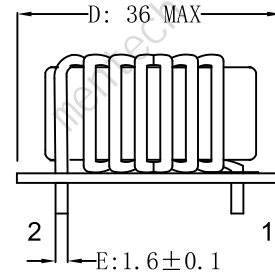
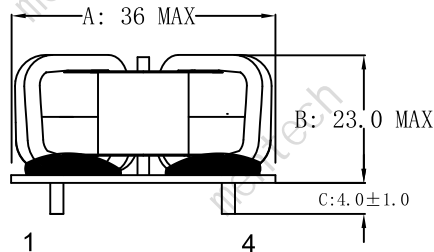


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



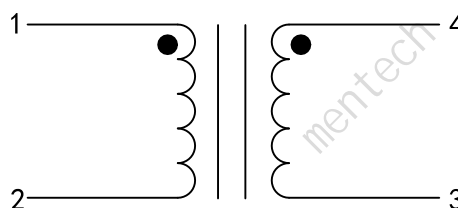
Electrical Specifications @25°C					
Part Number	Turns Ratio	OCV (mH MIN) @1KHz, 0. 25V	DCR (mΩ MAX)	RATED CURRENT (A MAX)	HI-POT
	1-2:3-4	1-2=3-4	1-2=3-4		N1:N2
CMBA2610DG802UA	1:1±3%	8.0 (13mH±35%)	6.5	20	2.6kVAC 2mA 2S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

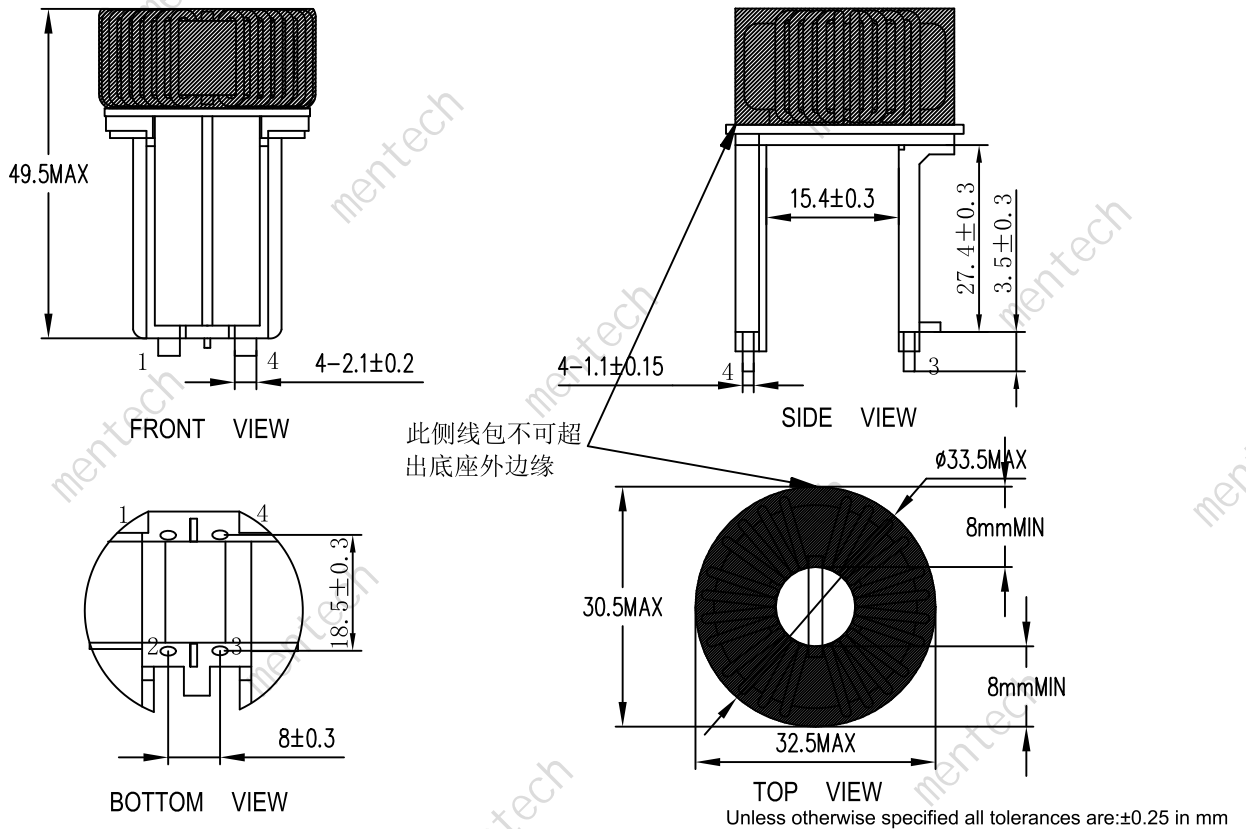


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

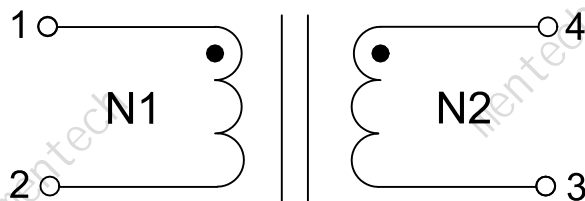


Electrical Specifications @25°C							
Part Number	Turns	OCL (mH·MIN) @100KHz, 1.0V	DCR (mΩ MAX)	HI-POT		IR	Q值 (MIN)
	N1:N2	1-2=3-4	1-2=3-4	COIL-COIL	COIL-CORE	COIL-COIL	1-2=3-4
CMBA2813DG172U	15:15±3%	1.7	13.5	1.5KVAC 5mA 60S	1000VAC 5mA 60S	500VDC 100MΩ MIN	5

MECHANICAL



SCHEMATICS

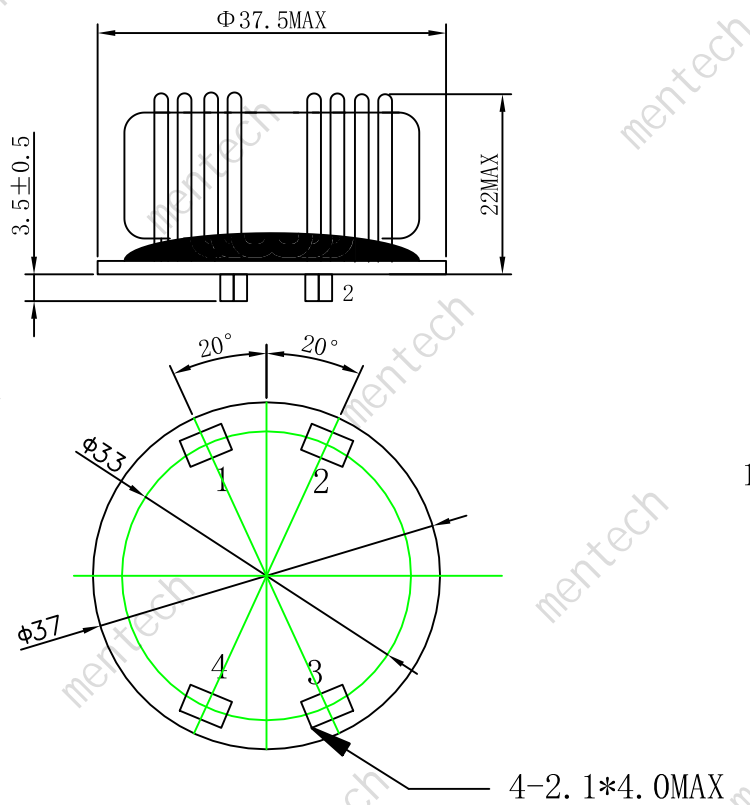


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



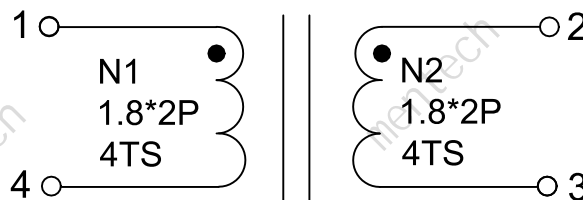
Electrical Specifications @25°C			
Part Number	Turns	OCL (μ H) @10KHz, 1. 0V	HI-POT
	N1:N2	1-4-2-3	COIL-COIL
CMBA2813DG231N	4:4±3%	232±35%	1. 5KVAC 1mA 60S

MECHANICAL

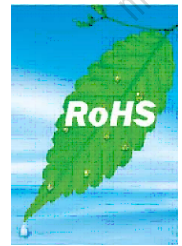


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

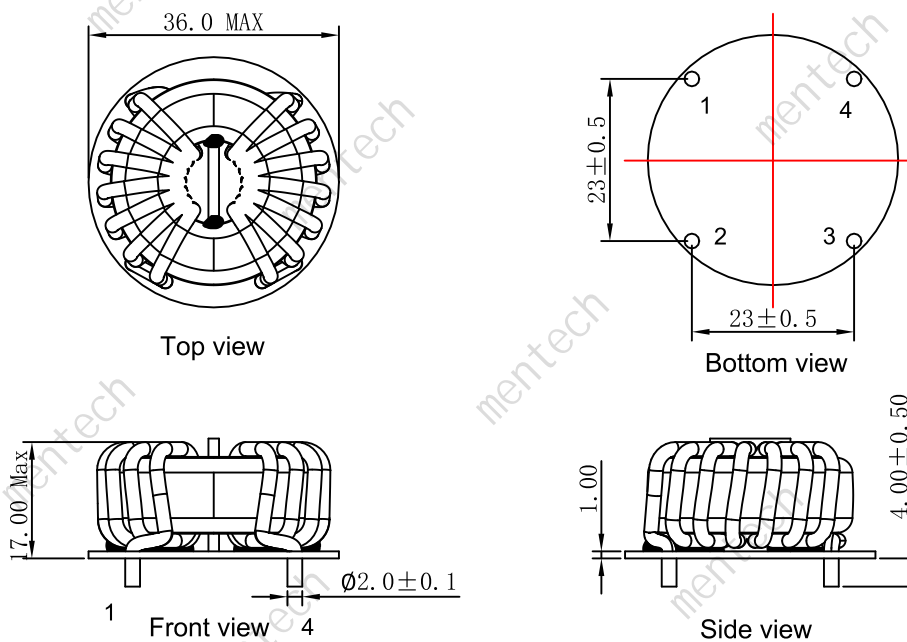


- RoHS Compliant (RoHS6).
- IEC62368-1 Compliancy.
- Termination finished: Sn-0.7Cu.
- Storage temperature range : -40°C to +125°C.
- Operating temperature range: -40°C to +125°C(including self-temperature rise)



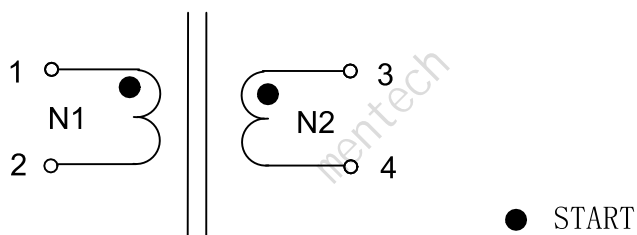
Electrical Specifications @25°C				
Part Number	Turns Ratio @20KHz, 1V	OCV @1KHz, 0.25V	DCR (mΩ Max)	HI-POT (5mA, 3Sec 50HZ)
	CMBA2911DG202U	1-2:4-3	1-2/4-3	1-2/4-3
	7:7	2.0mH min	5.5 max	AC2.0KV






MECHANICAL

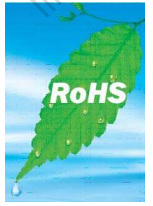


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



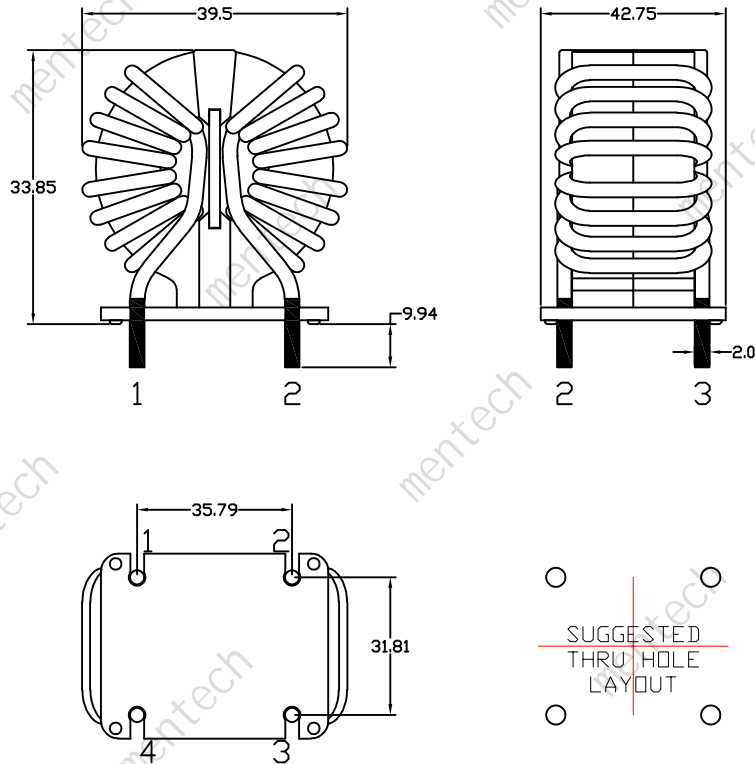
-  High impedance to minimize common mode noise.
-  RoHS Compliant.
-  AEC-Q200 Qualified.
-  Operating temperature range: -40°C to +125°C.
-  Storage temperature range: -40°C to +125°C.



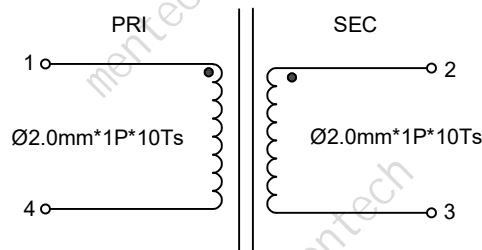
Electrical Specifications @25°C

Part Number	TurnsRatio(±3%)	OCL(mH Min) @10KHz,1V	OCL(mH Min) @100KHz,1V	DCR (mΩ Max)	Impedance (Ω Min)	HI-POT (V)
		1-4:2-3	1-4=2-3	1-4=2-3	1-4=2-3	25MHz
CMBA3010DG102U	1:1	1.0	0.7	5.0	300	1500VAC 2mA 60S 50HZ

MECHANICAL DIMENSIONS (mm)



SCHEMATICS



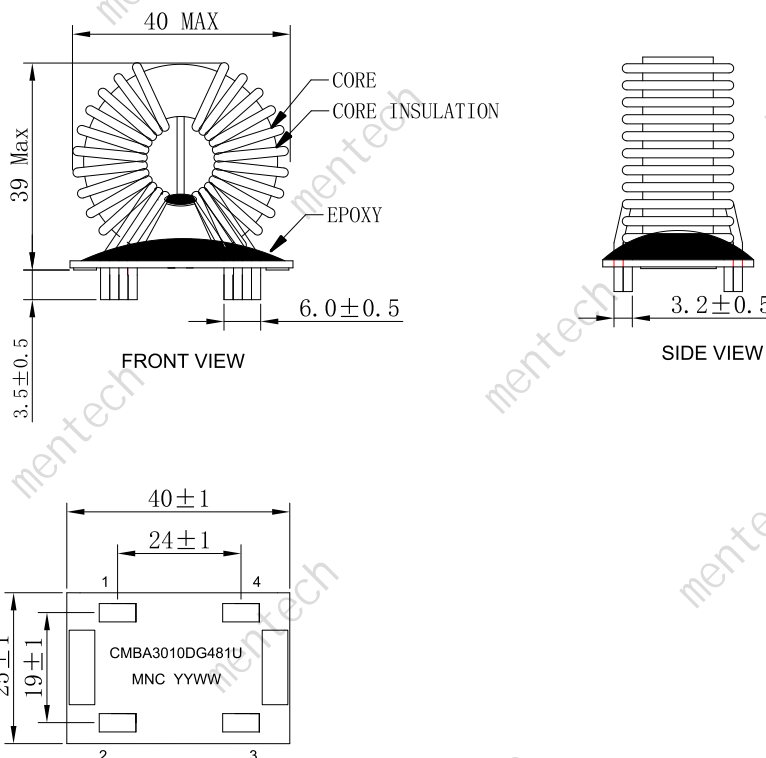
● Start Winding

- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



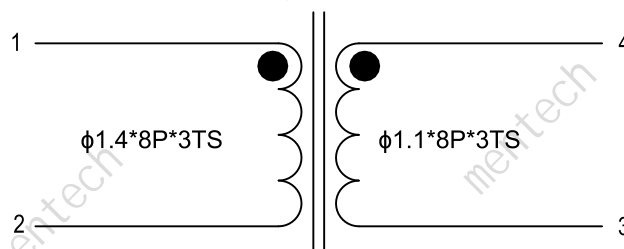
Electrical Specifications @25°C				
Part Number	Turns Ratio	OCL (μH MIN) @10KHz, 1V	DCR (mΩ MAX)	HI-POT
	1-2:3-4	1-2=3-4	1-2=3-4	N1:N2
CMBA3010DG481U	3:3±3%	480	3	2.5kVAC 3mA 2S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

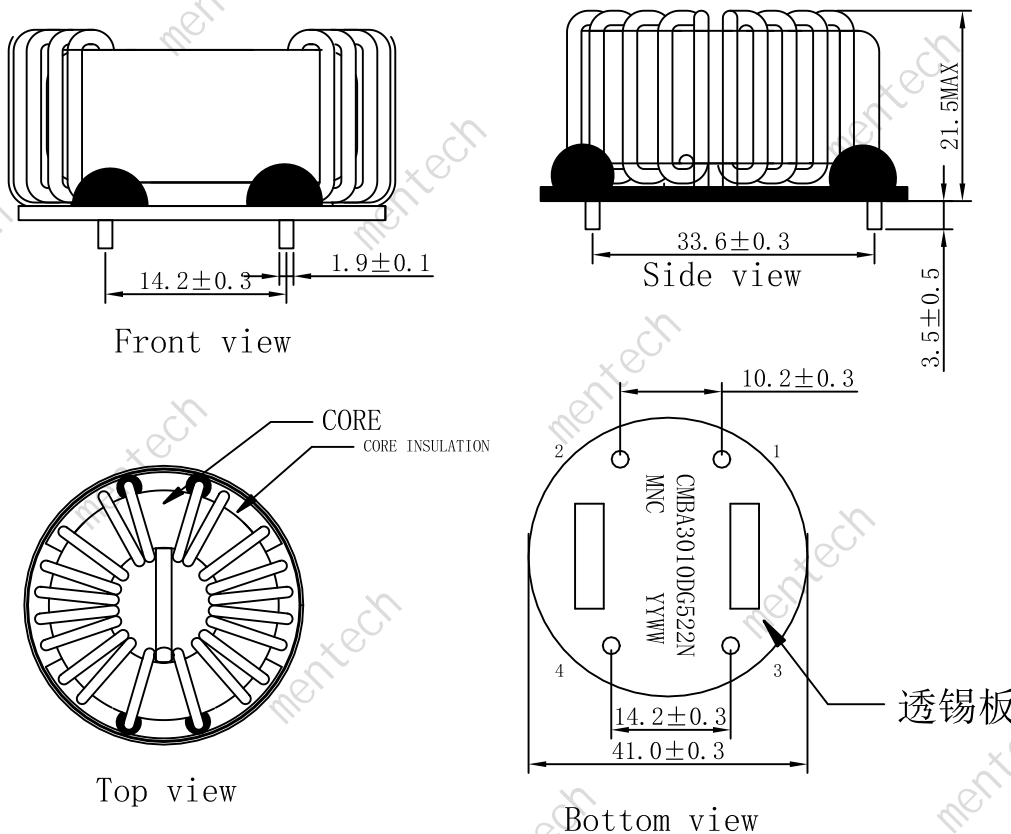


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



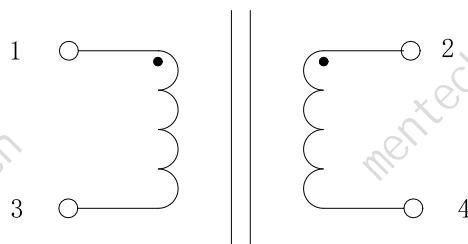
Electrical Specifications @25°C						
Part Number	Turns Ratio	OCL (mH MIN)		DCR (mΩ)	IR	HI-POT
	N1:N2	1-3=2-4		1-3=2-4	N1:N2	N1:N2
CMBA3010DG522N	9:9±3%	10KHz 0.25V 5.2mH TYP	100KHz 0.25V 1.5mH TYP	2.1-3.2	500VDC 6GΩ MIN	2.5kVAC 3mA 2S

MECHANICAL

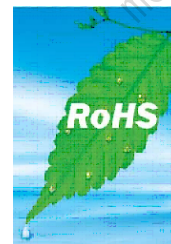


Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

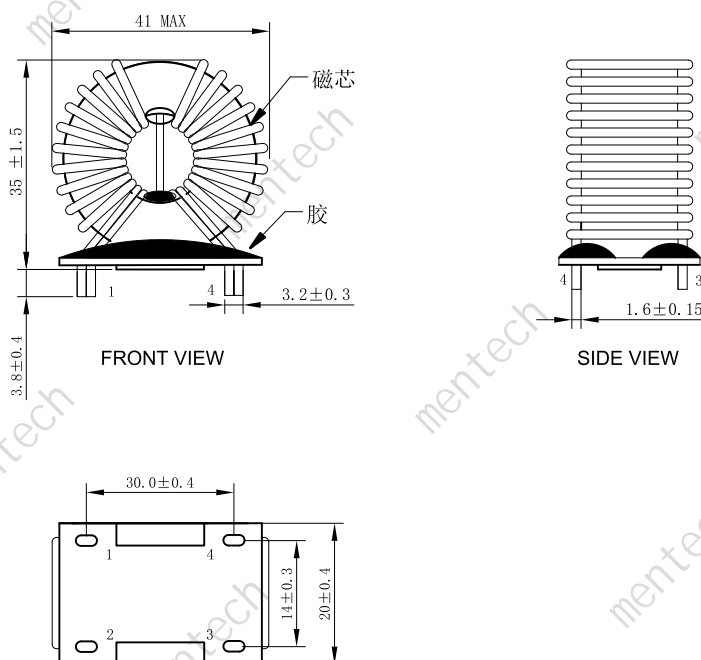


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



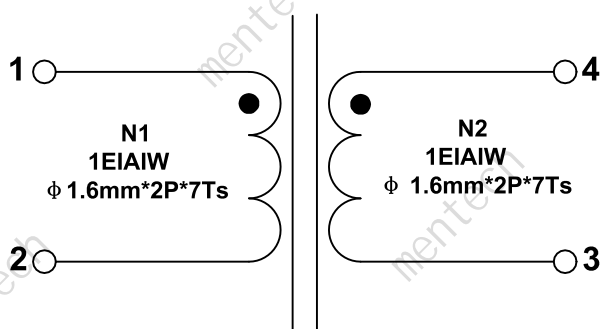
Electrical Specifications @25°C				
Part Number	Turns Ratio	ACL	DCR	HI-POT
		@100KHz, 0.1V	(mΩ MAX)	
		1-2=3-4	1-2-3-4	winding-winding
CMBA3010DG751U	2*7TS	750 μH MIN (1.2mH±35%TYP)	4	2000VAC 1mA 3S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

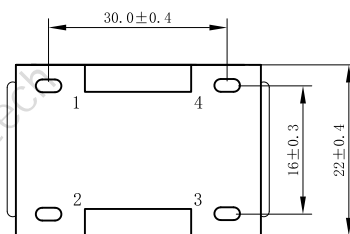
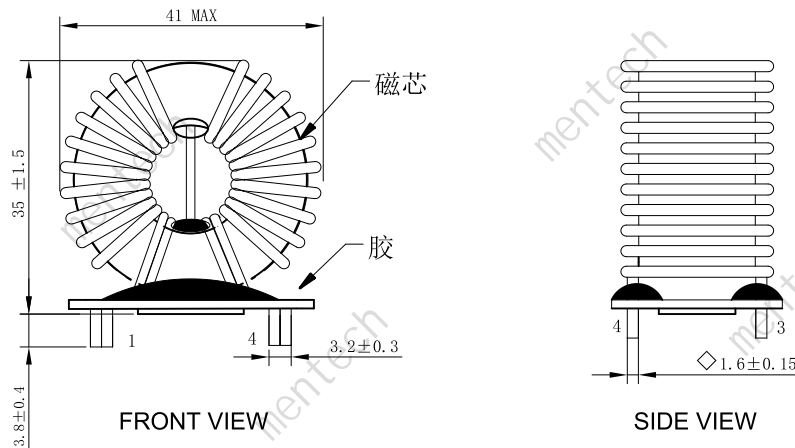


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



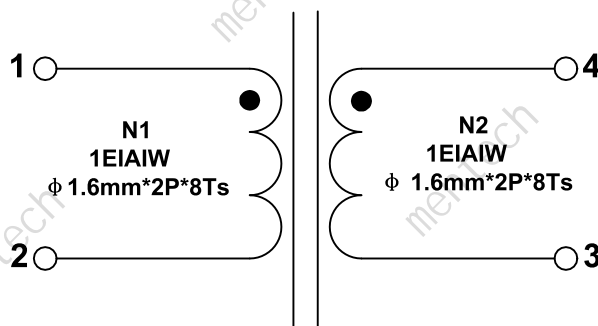
Electrical Specifications @25°C						
Part Number	Turns Ratio	OCL @100KHz, 0.1V	DCR (mΩ MAX)	HI-POT	Z	
		1-2=3-4	1-2=3-4	N1:N2	N1:N2	
CMBA3012DG751U	2*8TS	750 μH MIN (1.2mH±35%TYP)	4	2000VAC 1mA 3S	100KHz 0.1V 720 Ω MIN	100KHz 0.1V 720 Ω MIN

MECHANICAL

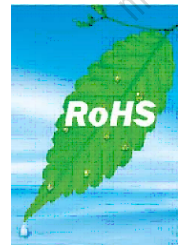


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

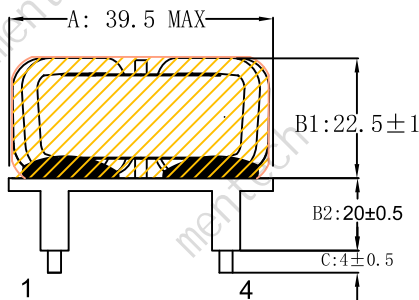


- RoHS Compliant.
- IEC60950 Compatible.
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

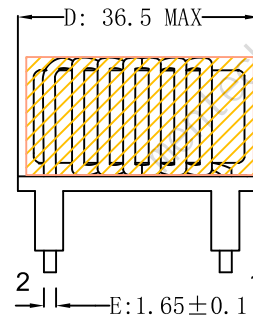


Electrical Specifications @25°C				
Part Number	Turns Ratio	OCL (mH)	DCR	HI-POT
		@1KHz, 1V	(mΩ MAX)	
		1-2=3-4	1-2=3-4	winding-winding
CMBA3015DG343N	2*20TS	33.85 ± 30%	10.5	3000VDC 1mA 3S

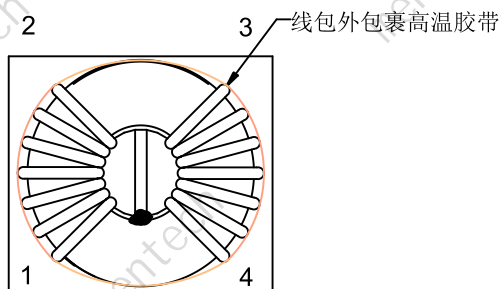
MECHANICAL



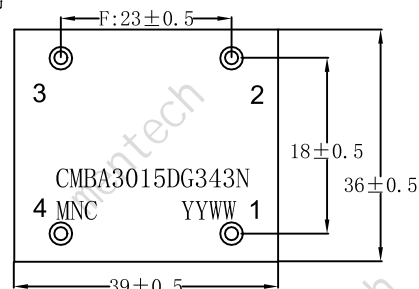
正视图



侧视图



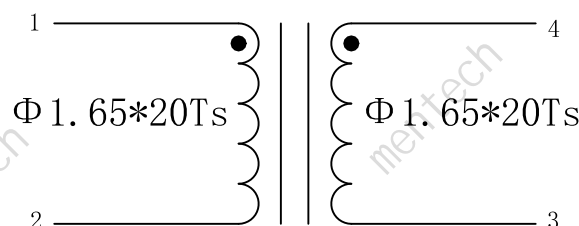
顶视图



底视图

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

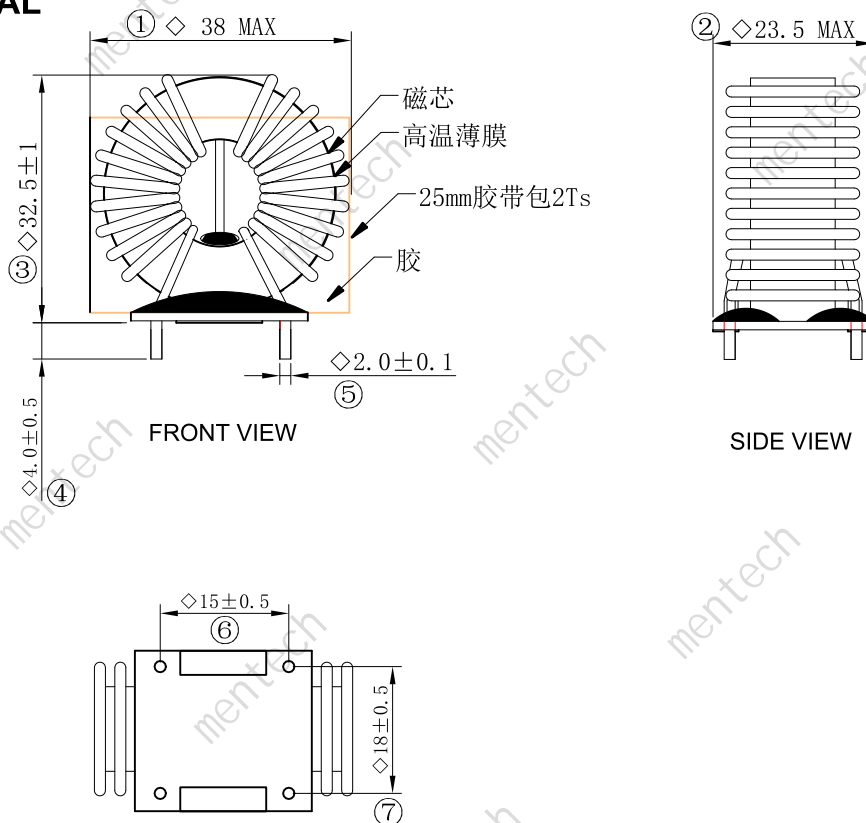


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



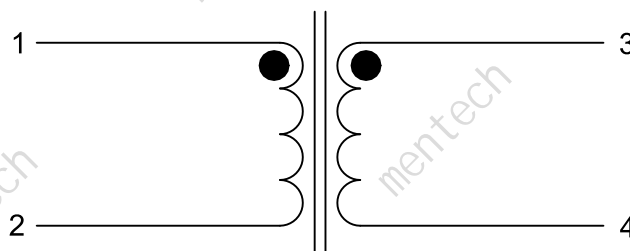
Electrical Specifications @25°C					
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0.1V	DCR (mΩ MAX)	HI-POT	Z
	1-2:3-4	1-2=3-4	1-2=3-4	N1:N2	1-2=3-4
CMBA3015DG652N	11:11±3%	6.5±30%	4	1800VAC 1mA 3S	100KHz 0.1V 1.5K Ω MIN 1MHz 0.1V 4.0K Ω MIN

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

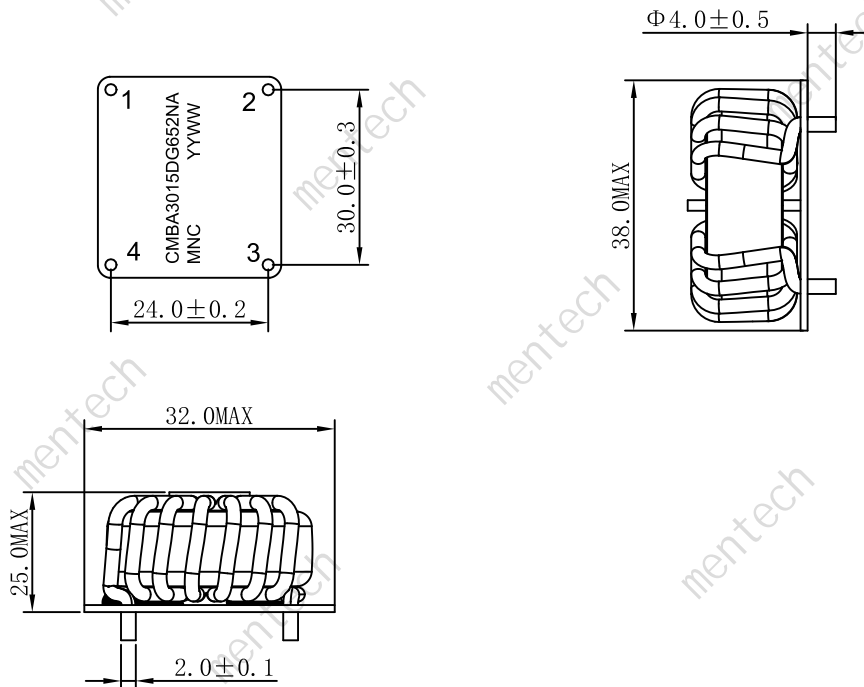


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



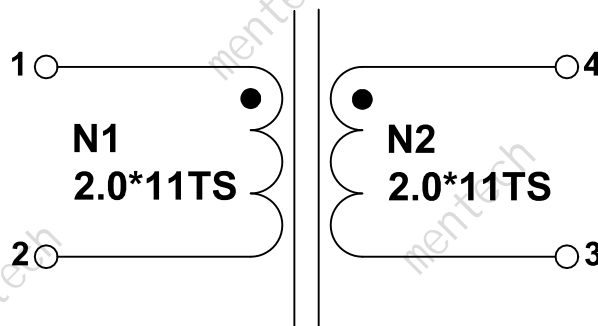
Electrical Specifications @25°C						
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0.1V	DCR (mΩ MAX)	HI-POT	Z	
	N1:N2	1-2=3-4	1-2=3-4	N1:N2	1-2=3-4	
CMBA3015DG652NA	11:11±3%	6.5±30%	4	1800VAC 1mA 3S	100KHz 1V 1.5K Ω MIN	1MHz 1V 4.0K Ω MIN

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

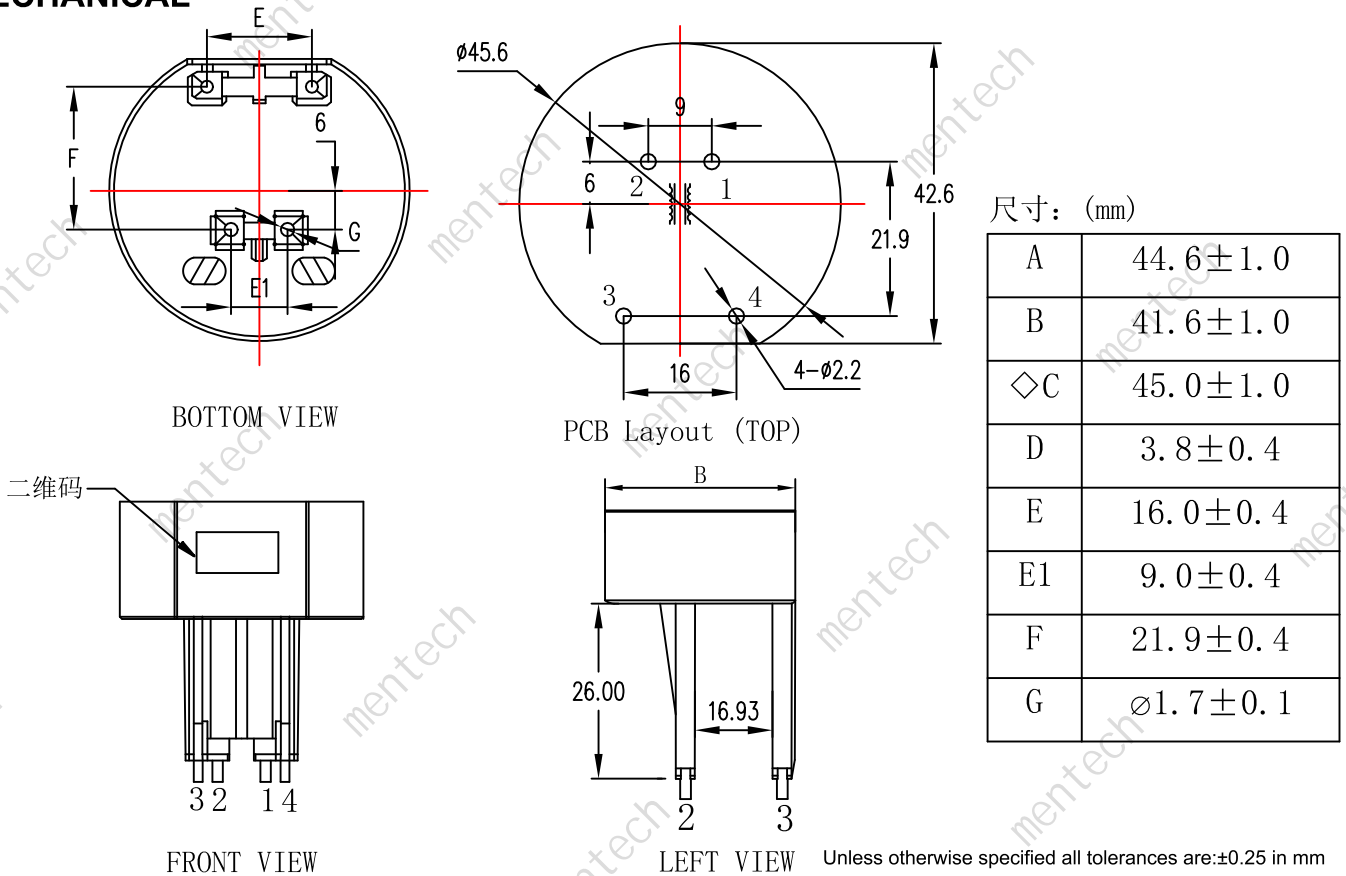


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

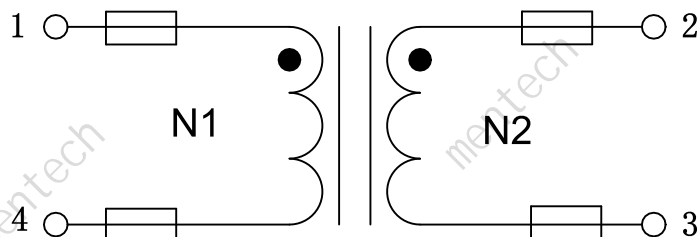


Electrical Specifications @25°C							
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 1V	OCL (mH MIN) @100KHz, 1V	OCL (μ H MAX) @100KHz, 1V	DCR (mΩ MAX)	HI-POT	IR
	1-4:2-3	1-4=2-3	1-4=2-3	L1-4-L2-3	1-4=2-3	COIL-COIL	COIL-COIL
CMBA3208DG122UA	11:11±3%	3.5-35%/+45%	1.2	120	4.5	1500VAC 1mA 60S	500V 100MΩ 5S

MECHANICAL



SCHEMATICS



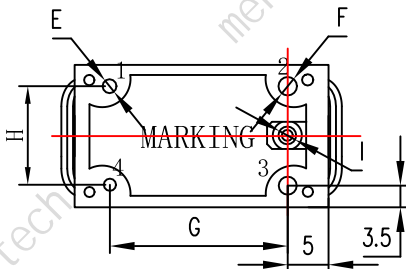
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



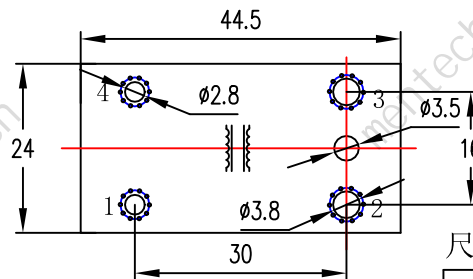
Electrical Specifications @25°C

Part Number	Turns (20KHz, 1V)	OCL (μH MIN) @100KHz, 1V	OCL (μH MAX) @100KHz, 1V	LK (μH MIN) @100KHz, 1V	DCR (mΩ MAX)	HI-POT	IR
		1-4:2-3	1-4=2-3	L1-4-L2-3	1-2 (short others)	1-4=2-3	COIL-COIL
CMBA3310DG701U	7:7±3%	700	35	0.5	4.5	1500VAC 1mA 60S	500V 100MΩ 5S

MECHANICAL



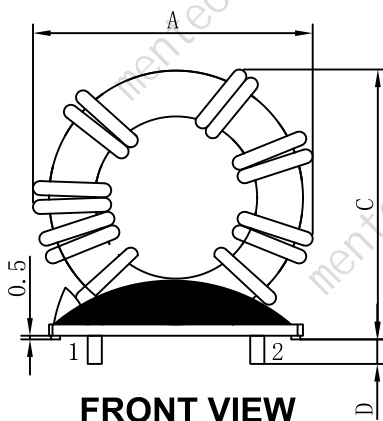
BOTTOM VIEW



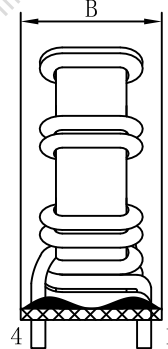
PCB Layout (TOP)

尺寸: (mm)

A	43.5 ± 1.0
B	23.0 ± 1.0
C	42.5 ± 1.0
D	3.8 ± 0.4
E	∅2.2 ± 0.2
F	∅3.0 ± 0.4
G	30.0 ± 0.4
H	16.0 ± 0.5
I	∅3.0 ± 0.1



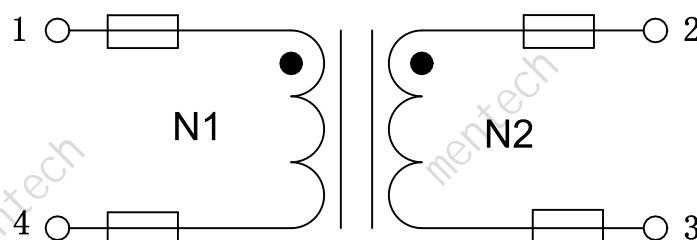
FRONT VIEW



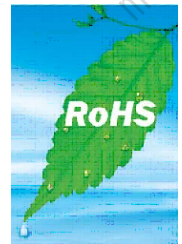
SIDE VIEW

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

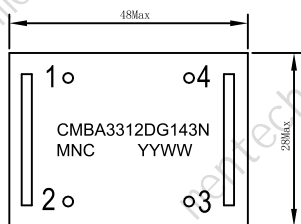


- RoHS Compliant (RoHS6).
- IEC62368-1 Compliant.
- Operating temperature range: -40°C to +125°C (including self-temperature rise)
- AEC-Q200 to be qualified.

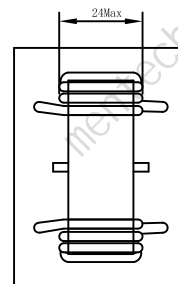


Electrical Specifications @ 25°C					
Part Number	Turns Ratio @20KHz,0.1V	OCL(mH) @10KHz,1V	DCR (mΩ Max)		HI-POT (VAC,1mA,60Sec)
	1-2:4-3	1-2=4-3	1-2	4-3	(1-2) TO (4-3)
CMBA3312DG143N	14:14±5%	14±30%	6.5	6.5	1500

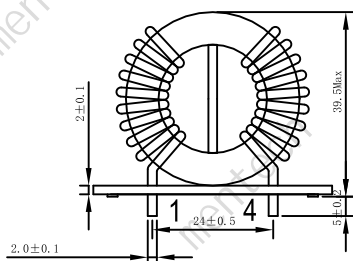
MECHANICAL



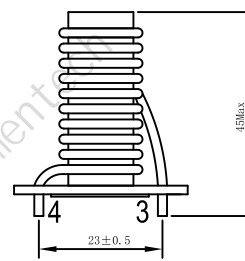
BOTTOM VIEW



TOP VIEW



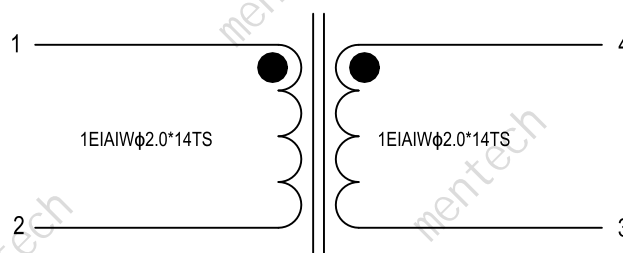
FRONT VIEW



SIDE VIEW

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



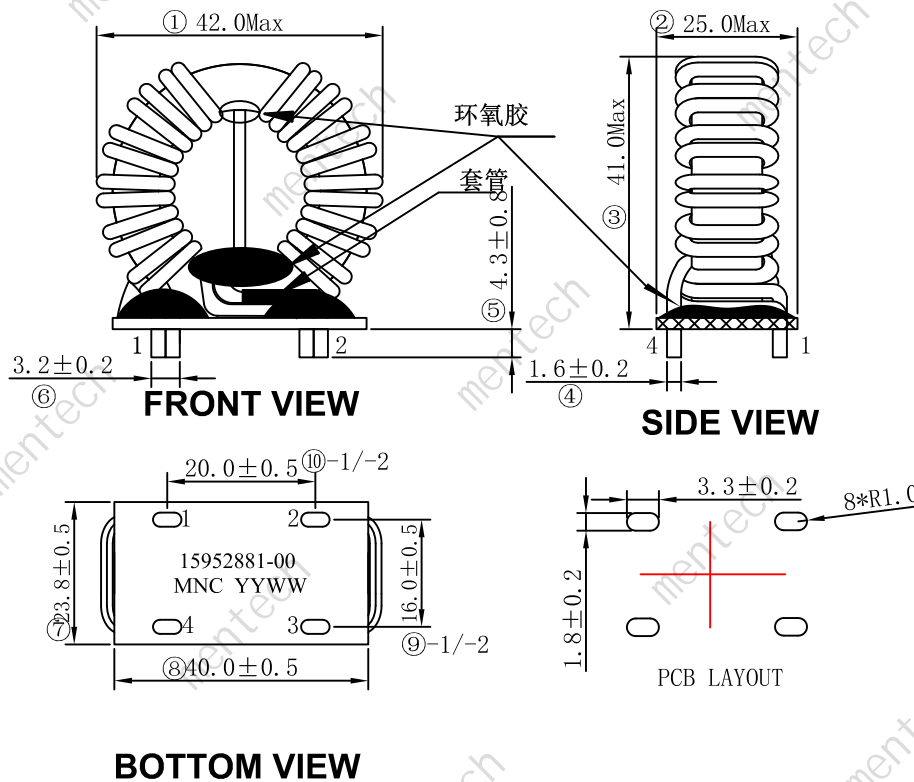
● In Phase

- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



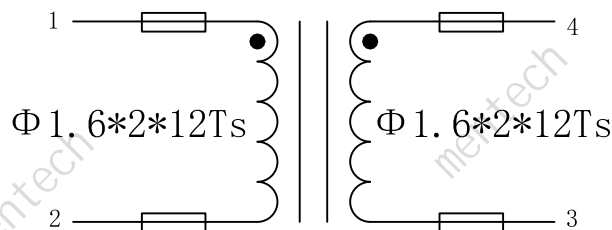
Electrical Specifications @25°C					
Part Number	Turns (20KHz, 1V)	OCL(mH MIN) @1KHz, 1V	DCR (mΩ MAX)	RATED CURRENT (A MAX)	HI-POT
	N1:N2	1-2=3-4	1-2=3-4		N1:N2
CMBA3312DG802U	12:12±0.4	8.0	5	35	3.5KVDC 1mA 2S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

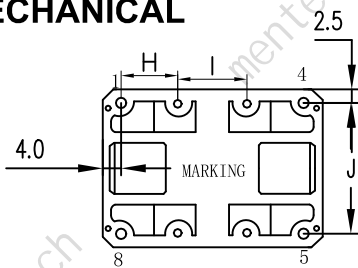


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

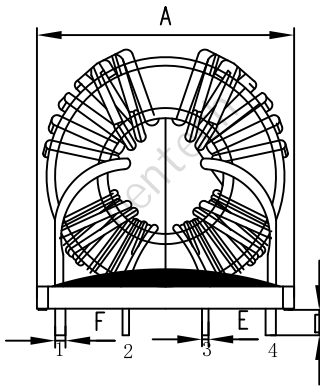


Electrical Specifications @25°C												
Part Number	Turns (20KHz, 1V)	OCL (mH MIN) @100KHz, 1V	OCL (μH MAX) @100KHz, 1V						DCR (mΩ MAX)		HI-POT	IR
	1-8:2-7:3-6:4-5	1-8=2-7=4-5=3-6	L1-8 -L2-7	L1-8 -L3-6	L1-8 -L4-5	L2-7 -L3-6	L2-7 -L4-5	L3-6 -L4-5	1-8=4-5	2-7=3-6	coil-coil	coil-coil
CMBA4015DG122U	7:7:7:7±3%	1.2	60						3.6	6.0	1500VAC 1mA 60S	500VDC 100MΩ 5S

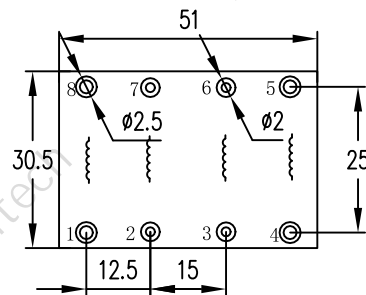
MECHANICAL



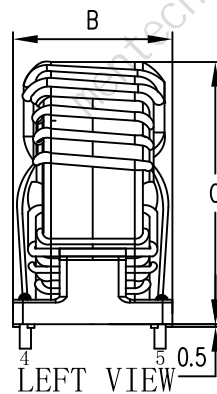
BOTTOM VIEW



FRONT VIEW



PCB Layout (TOP)



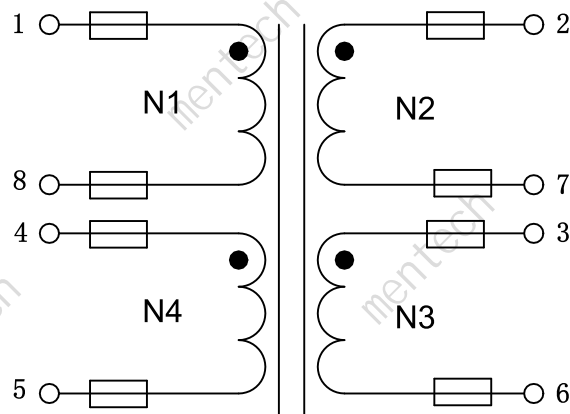
LEFT VIEW

尺寸: (mm)

A	49.0 ± 1.0
B	29.5 ± 1.0
◇C	47.5 ± 1.0
D	3.8 ± 0.4
E	∅1.5 ± 0.15
F	∅2.0 ± 0.2
H	12.5 ± 0.5
I	15.0 ± 0.5
J	25.0 ± 0.5

Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



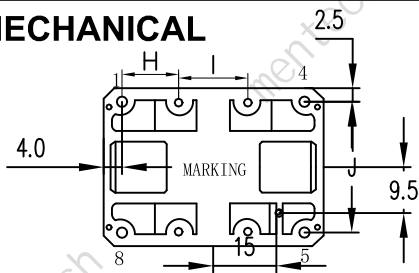
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



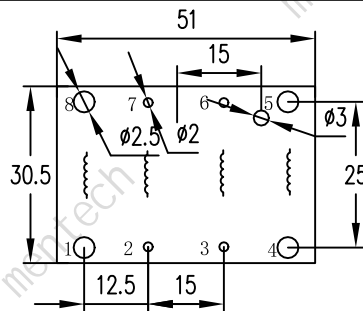
Electrical Specifications @25°C

Part Number	Turns (20KHz, 1V)	OCL (mH MIN) @100KHz, 1V	OCL (μ H MAX) @100KHz, 1V				DCR (mΩ MAX)		HI-POT	IR
	1-8:2-7:3-6:4-5	1-8=2-7=4-5=3-6	L1-8 -L2-7	L1-8 -L3-6	L1-8 -L4-5	L2-7 -L3-6	L2-7 -L4-5	L3-6 -L4-5	1-8=4-5 2-7=3-6	coil-coil
CMBA4015DG212U	8:8:8:8±3%	2.1	60				5.2	8.7	1500VAC 1mA 60S	500VDC 100M Ω 5S

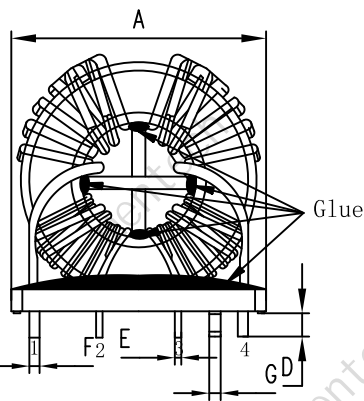
MECHANICAL



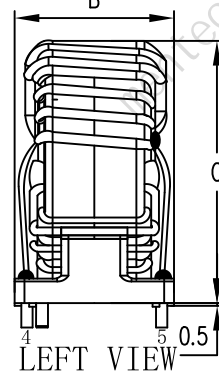
BOTTOM VIEW



PCB Layout (TOP)



FRONT VIEW



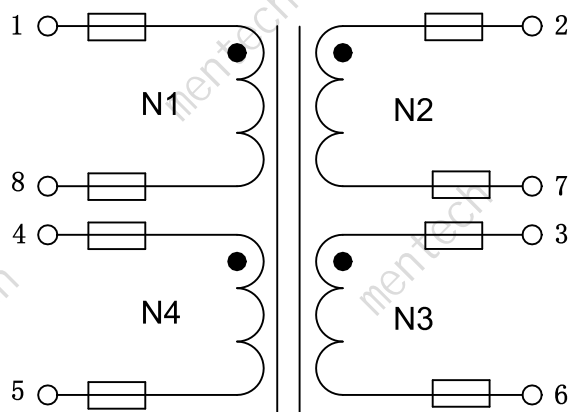
LEFT VIEW

尺寸: (mm)

A	48.5 ± 1.0
B	29.5 ± 1.0
◇C	47.5 ± 1.0
D	3.8 ± 0.4
E	∅1.3 ± 0.15
F	∅1.8 ± 0.2
G	∅2.5 ± 0.1
H	12.5 ± 0.5
I	15.0 ± 0.5
J	25.0 ± 0.5

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



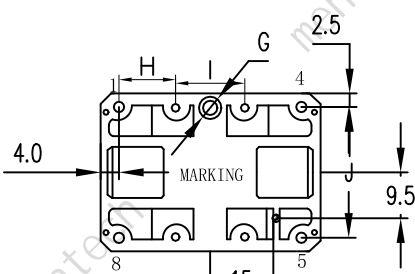


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

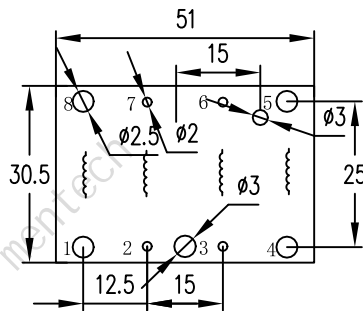
Electrical Specifications @25°C

Part Number	Turns (20KHz, 1V)	OCL(mH MIN) @100KHz, 1V	OCL(μH MAX) @100KHz, 1V				DCR (mΩ MAX)		HI-POT	IR
	1-8:2-7:3-6:4-5	1-8=2-7=4-5=3-6	L1-8 -L2-7	L1-8 -L3-6	L1-8 -L4-5	L2-7 -L3-6	L2-7 -L4-5	L3-6 -L4-5	1-8=4-5 2-7=3-6	coil-coil
CMBA4015DG272U	9:9:9:9±3%	2.7	60				5.7	9.2	1500VAC 1mA 60S	500VDC 100MΩ 5S

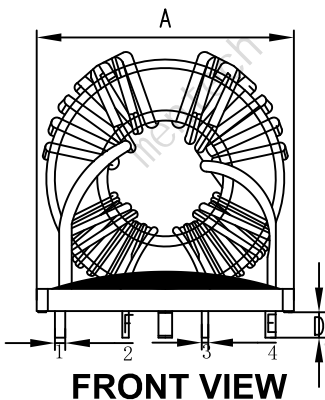
MECHANICAL



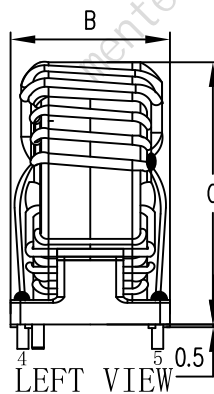
BOTTOM VIEW



PCB Layout (TOP)



FRONT VIEW



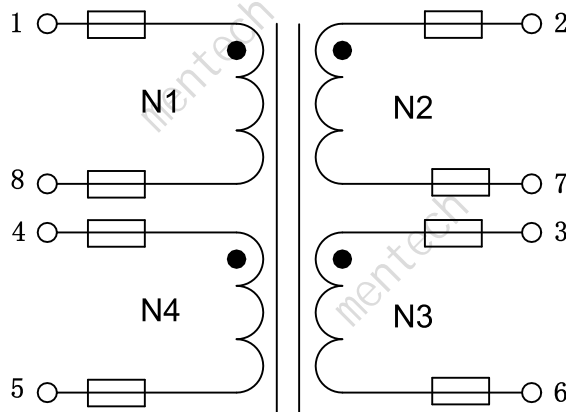
LEFT VIEW

尺寸: (mm)

A	48.5 ± 1.0
B	29.5 ± 1.0
◇C	47.5 ± 1.0
D	3.8 ± 0.4
E	∅1.3 ± 0.15
F	∅1.8 ± 0.2
G	∅2.5 ± 0.2
H	12.5 ± 0.5
I	15.0 ± 0.5
J	25.0 ± 0.5

Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



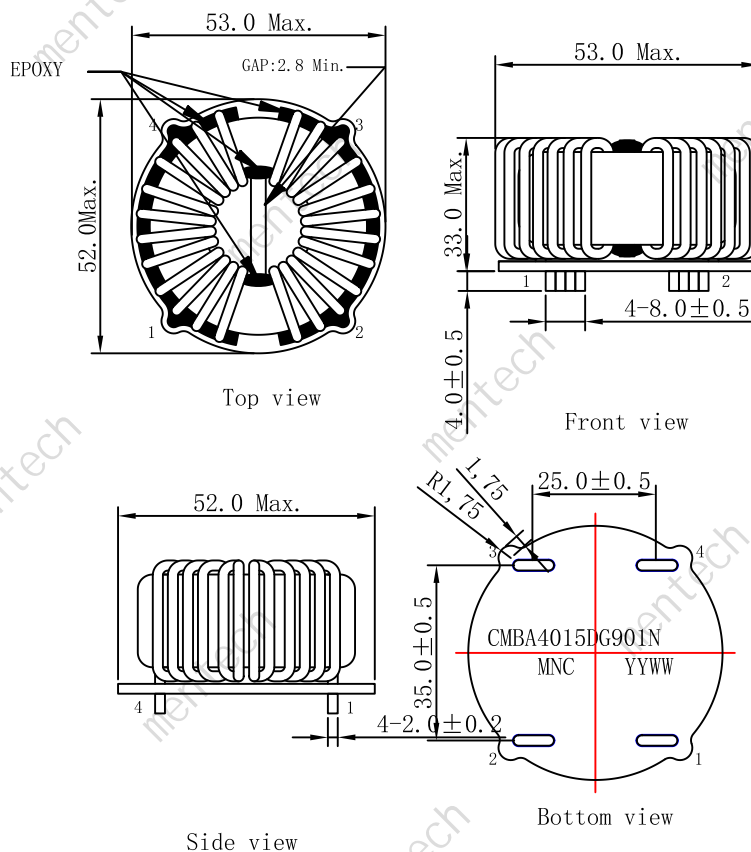
- RoHS Compliant.
- Termination finished : TIN.
- Operating Temperature Range: -40°C TO 125°C(including coil seft temperature rise)
- Storage temperature range: -40°C TO 125°C



Electrical Specifications @ 25°C

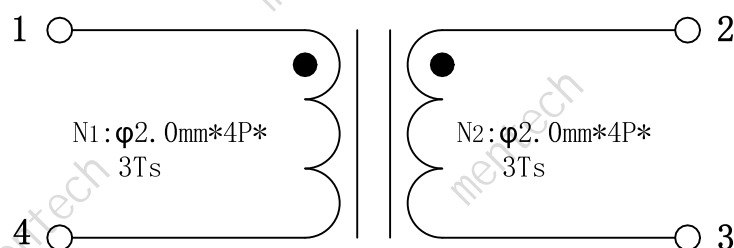
Part Number	L(uH)		Lk(uH)	Turns Ratio	DCR(mΩ)		HI-POT	IR
	@1kHz/1V		@1kHz/1V	@20kHz/1.0V	@20°C		AC1.2kV/50Hz/1mA/60S	500V/60S
CMBA4015DG901N	1-4	2-3	¹⁻⁴ (2 and 3 are shorted)	N1:N2	1-4	2-3	N1-N2	N1-N2
	900+50%/-30%		0.5Min.	1:1	0.6 Max.		No breakdown, no arc	1000MΩ Min.

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



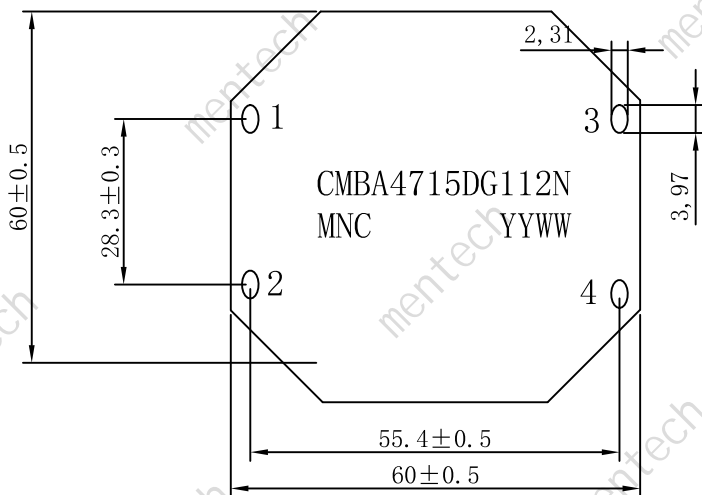
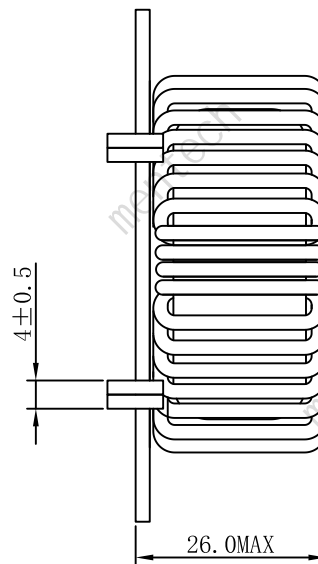
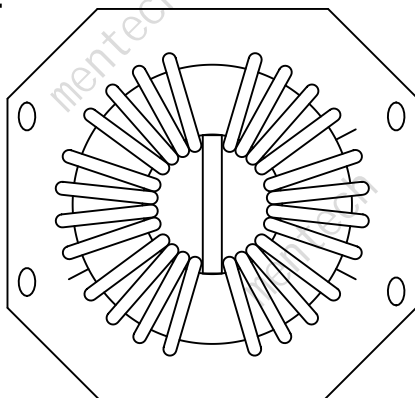
● : In phase

- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



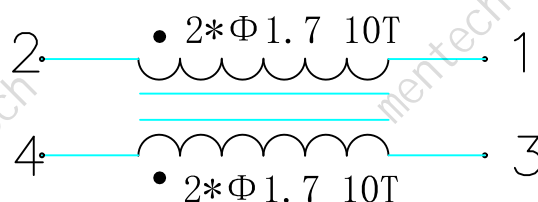
Electrical Specifications @25°C						
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0. 25V	Lk (μ H MAX) @10KHz, 0. 25V	抗电强度	Z(1V)	
	N1:N2	1-2=3-4	2-4 (short 1-3)	(1-2)~(3-4)	2, 4-1, 3	
CMBA4715DG112N	10: 10±3%	1. 16±30%	50	3KVAC 1mA 60S	100KHz TBD	1MHz TBD

MECHANICAL

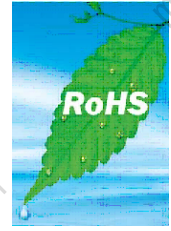


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



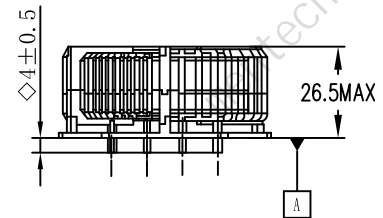
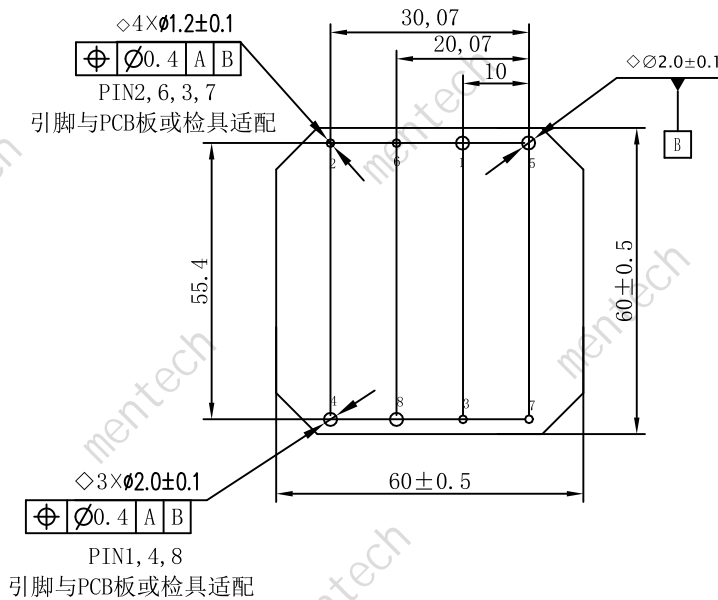
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



Electrical Specifications @25°C

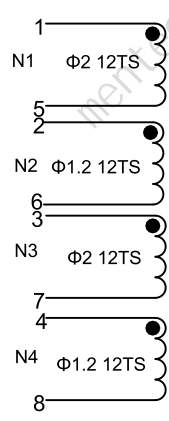
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0.25V	Lk (μH MAX) @100KHz, 1V			抗电强度	Z (1V)
	N1:N2:N3:N4	1-5=2-6=3-7=4-8	5-6 (short 1-2)	5-6 (short 1-3)	5-6 (short 1-4)	N1/N2/N3/N4 (each other相邻绕组)	1, 2, 3, 4-5, 6, 7, 8
CMBA4715DG162NA	12:12:12:12±3%	1.67±30%	50			3KVAC 1mA 60S	100KHz 500 Ω MIN 1MHz 1.35K Ω MIN

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

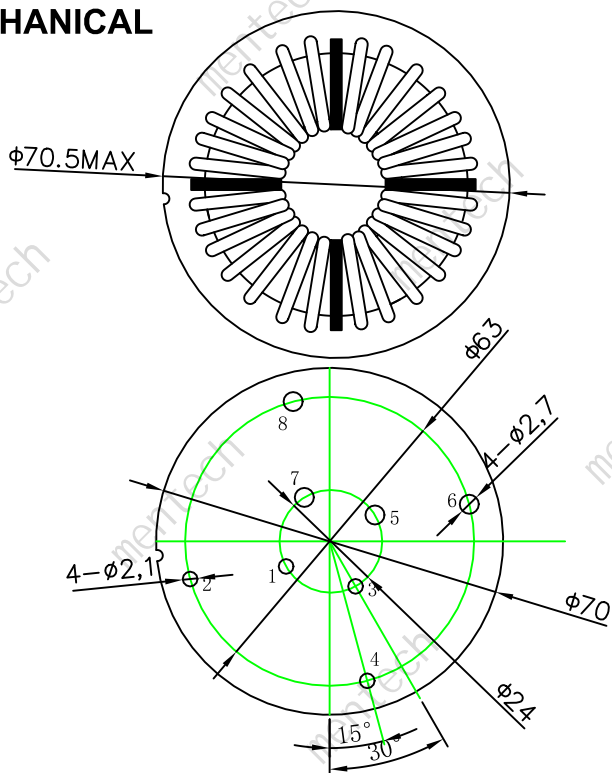


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



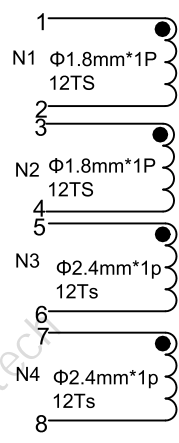
Electrical Specifications @25°C					
Part Number	Turns (20KHz, 1V)	OCL (mH MIN) @10KHz, 1V	IR	HI-POT	
	N1:N2:N3:N4	1-2=4-3=5-6=7-8	COIL-COIL	CORE-COIL	COIL-COIL
CMBA5015DG502U	12: 12: 12: 12 ± 3%	5	500VDC 100MΩ MIN	1500VAC 1mA 60S	2000VAC 1mA 60S

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 mm

SCHEMATICS

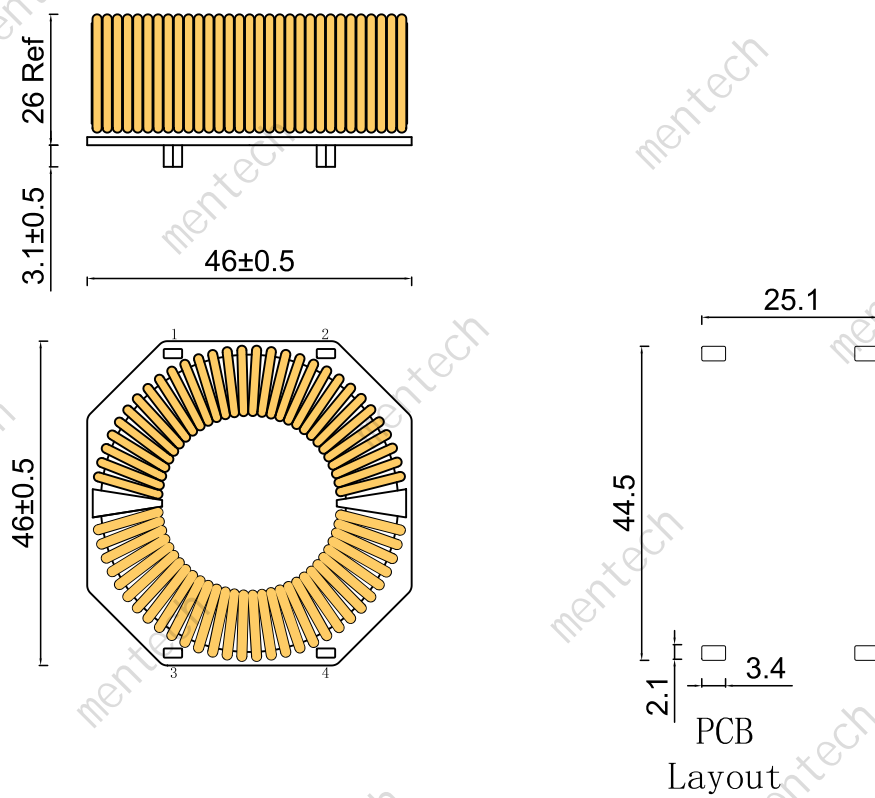


- RoHS Compliant (RoHS6)
- IEC60950 Compliancy
- Operating temperature range: -40°C to +125°C (including self-temperature rise)
- AEC-Q200 to be qualified



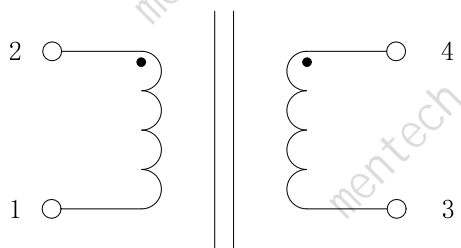
Electrical Specifications @25°C					
Part Number	OCL(μH) @100kHz,1V	Lk(μH) @100kHz,1V	Impedance(kΩ) 100kHz,1V	Impedance(kΩ) 1MHz,1V	Hi-POT
		2-1/4-3	2-4 (1, 3 short)	2,4-1,3	2,4-1,3
CMBA5519DG452U	4500 Min	50 Max	3 Min	5 Min	3000Vac , 1mA, 50/60Hz,60s

MECHANICAL



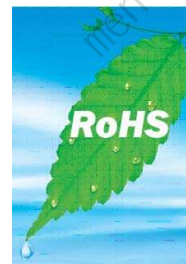
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



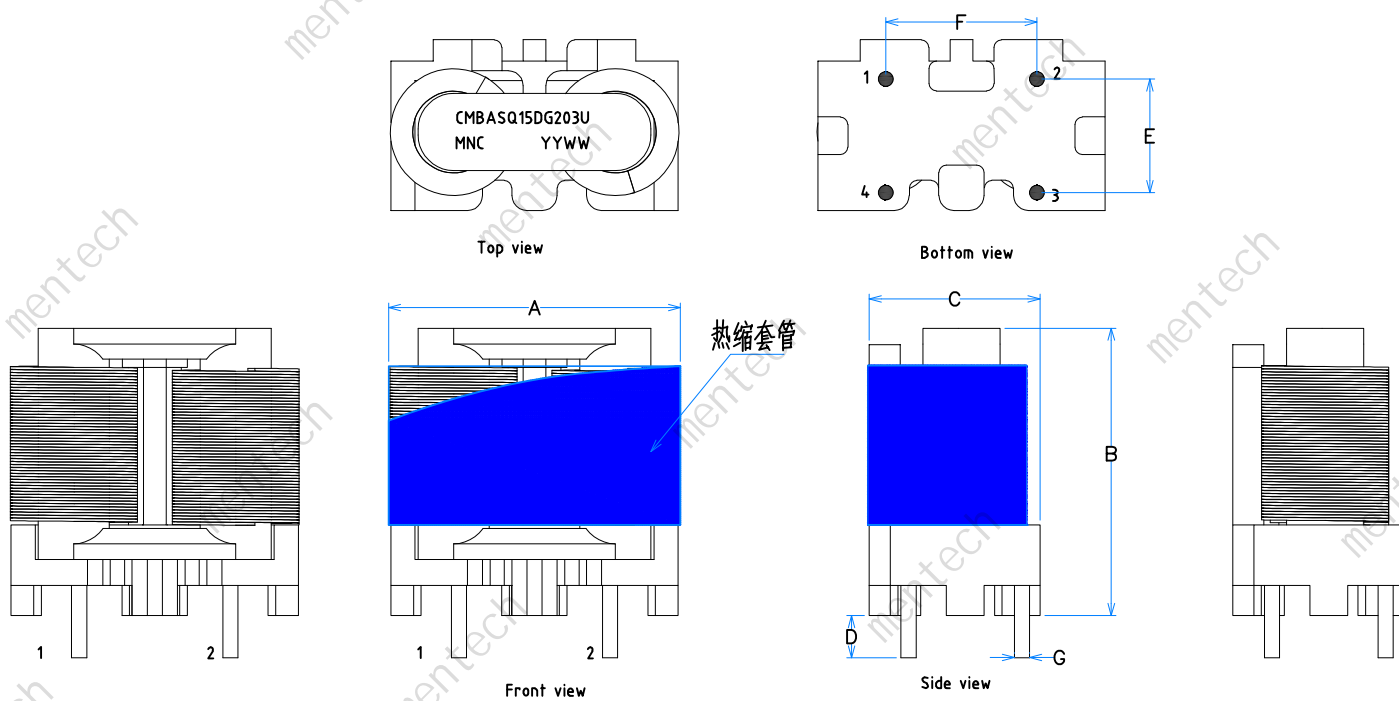
● Start Point

- RoHS Compliant (RoHS6).
- IEC62368-1 Compliant.
- Operating temperature range: -40°C to +105°C (including self-temperature rise)
- AEC-Q200 to be qualified.



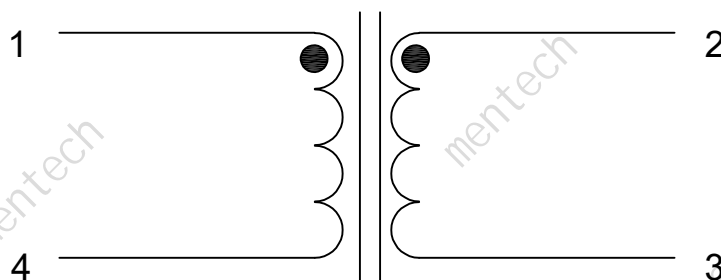
Electrical Specifications @25°C						
Part Number	Turns Ratio @20KHz,1V	OCL (mH Min) @10KHz,1V		DCR (mΩ Max)		HI-POT (VAC,2mA,3Sec)
	1-4:2-3	1-4	2-3	1-4	2-3	COIL-COIL
CMBASQ15DG203U	1:1±5%	20	20	160	160	1500

MECHANICAL (mm)



A	B	C	D	E	F	G
22.5 MAX	18.2 MAX	12.5 MAX	2.8±0.3	7.5±0.5	10±0.5	0.7±0.1

SCHEMATICS

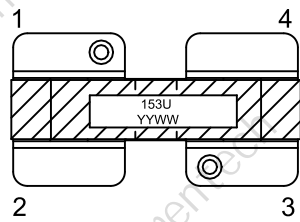


- RoHS Compliant.
- IEC60950 Compatible.
- Termination finished: Sn-0.7Cu.
- Operating temperature range: -40°C to +125°C.
- Rated current: 240mA causes 40°C temp rise from ambient.

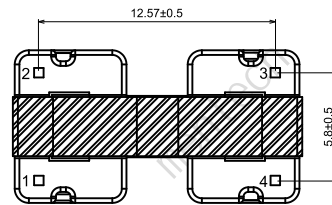


Electrical Specifications @ 25°C					
Part Number	OCL(mH MIN)	Lk(mH MIN)	Turns Ratio	DCR(Ω)	HI-POT
	@10kHz,0.1V	@100kHz,0.1V	@20kHz/1.0V	@20°C	
	1-2=4-3	1-4 (shorted Pin2+3)	1-2;3-4	1-2=4-3	Pin1-Pin4
CMEE11DG153U	15.6	2.5	1:1±3%	6.3±10%	1.5kV AC 1mA,60S

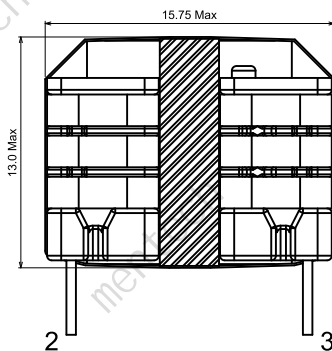
MECHANICAL



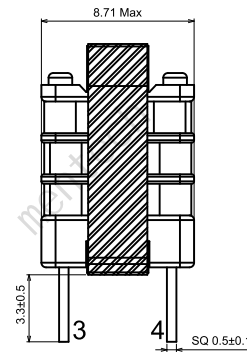
TOP VIEW



BOTTOM VIEW



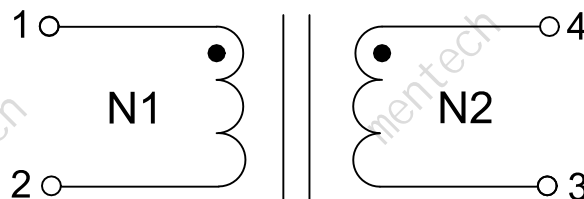
FRONT VIEW



SIDE VIEW

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

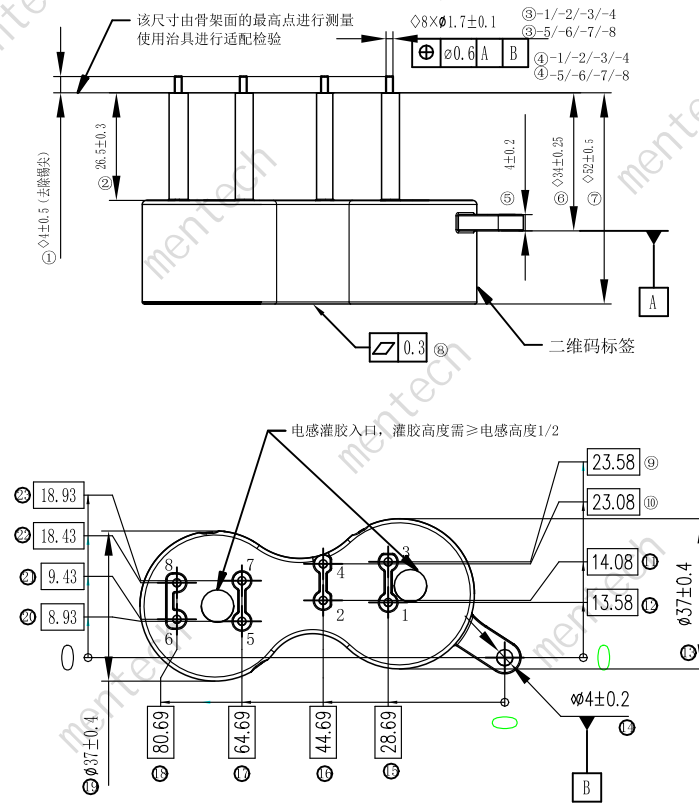


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(including self temperature rise) : -40°C to +125°C.

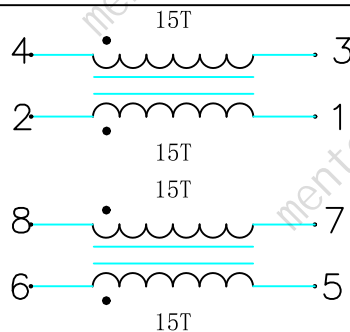


Electrical Specifications @25°C					
Part Number	Turns (100KHz, 1V)	OCL (mH MIN) @100KHz, 0.1V	DCR (mΩ MAX)	HI-POT	
		1-2:3-4 (5-6:7-8)	1-2=4-3 (5-6=7-8)	1-2=3-4=5-6=7-8	1-2:3-4 (5-6:7-8)
MGHA-0020G	1:1 ±3%	3.7	7.5	2000VAC 1mA 60S	2400VAC 1mA 60S

MECHANICAL



SCHEMATICS

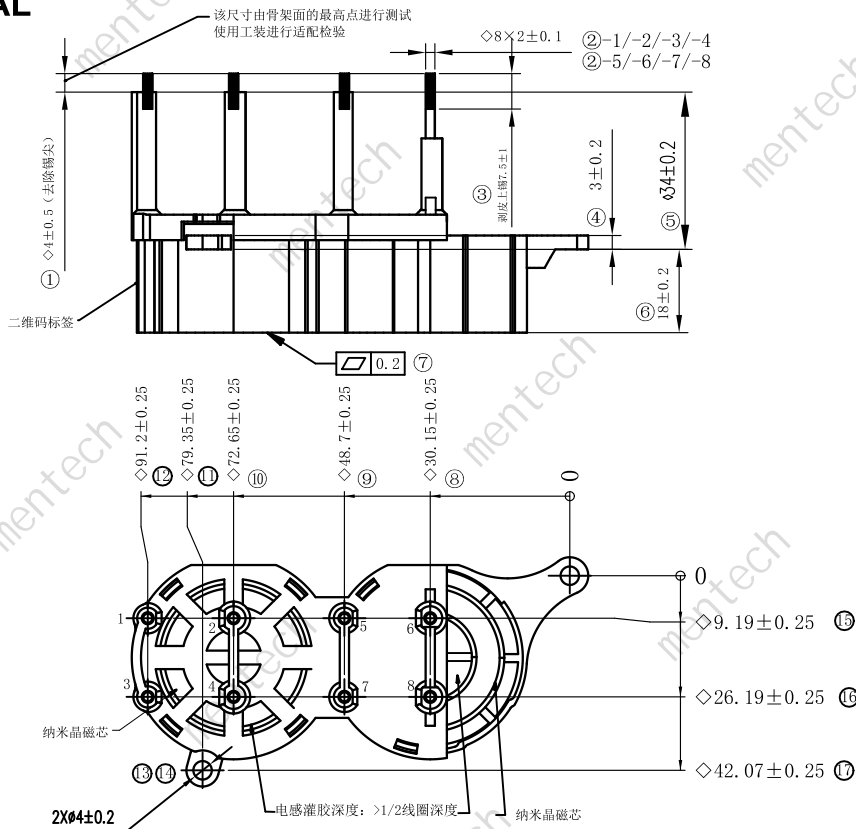




- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

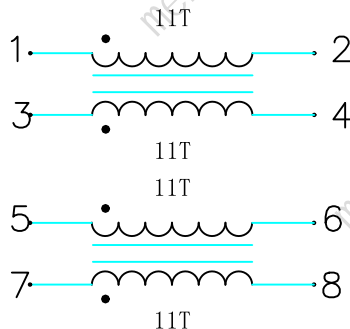
Electrical Specifications @25°C							
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0. 1V	Z(KΩ MIN)				HI-POT
	1-2:3-4(5-6:7-8)	1-2=4-3(5-6=7-8)	1-2:3-4:5-6:7-8				1-2:3-4(5-6:7-8)
MGHA-0021G	11:11±3%	8±30%	10KHz 0. 1V 0. 2KΩ	100KHz 0. 1V 1. 5KΩ	500KHz 0. 1V 3. 0KΩ	1MHz 0. 1V 4. 0KΩ	1500VAC 1mA 60S 1800VAC 1mA 3S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



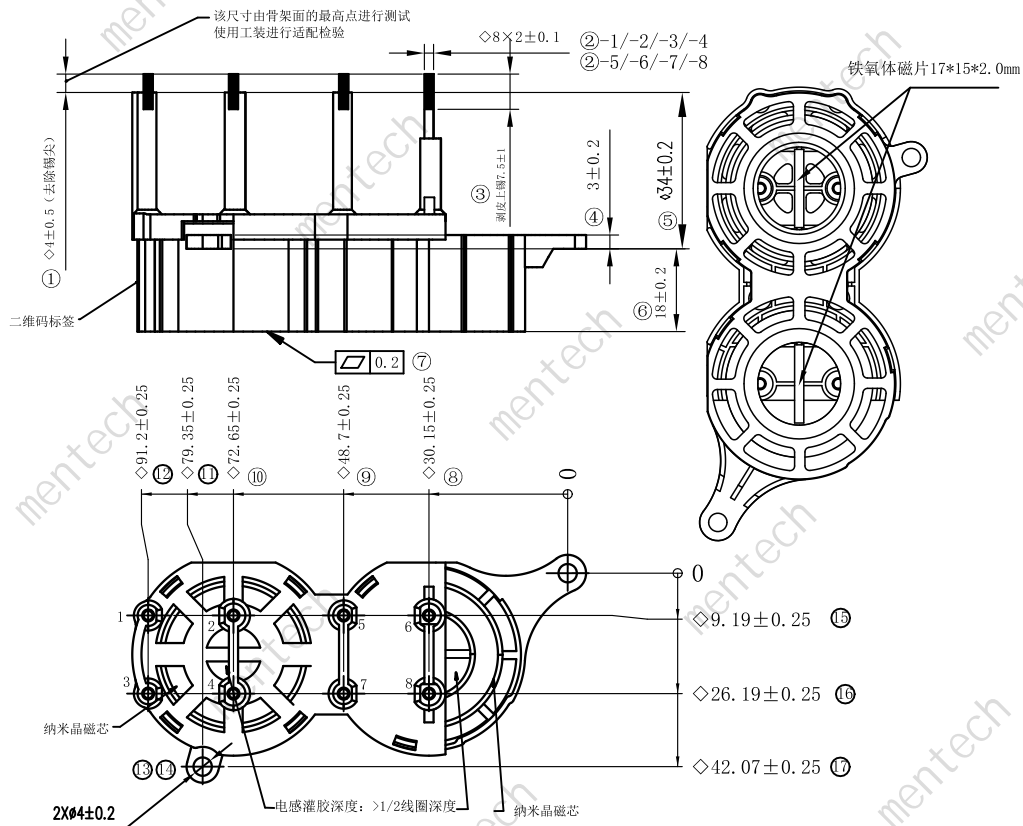
- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.



Electrical Specifications @25°C

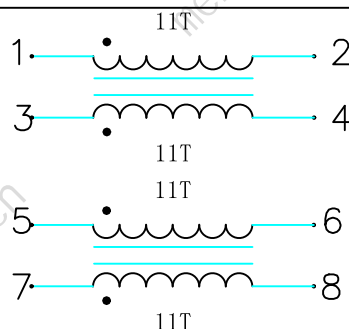
Part Number	Turns (20KHz, 1V)	OCL (mH) @10KHz, 0. 1V	LK (μ H MIN) @10KHz, 0. 1V		Z (K Ω MIN)				HI-POT	
	1-2:3-4(5-6:7-8)	1-2=4-3(5-6=7-8)	1-2 (SHORT 3-4)	5-6 (SHORT 7-8)	1-2:3-4:5-6:7-8				1-2:3-4(5-6:7-8)	
MGHA-0022G	11:11±3%	8±30%	7.0		10KHz 0. 1V 0. 2K Ω	100KHz 0. 1V 1. 5K Ω	500KHz 0. 1V 3. 0K Ω	1MHz 0. 1V 4. 0K Ω	1500VAC 1mA 60S	1800VAC 1mA 3S

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

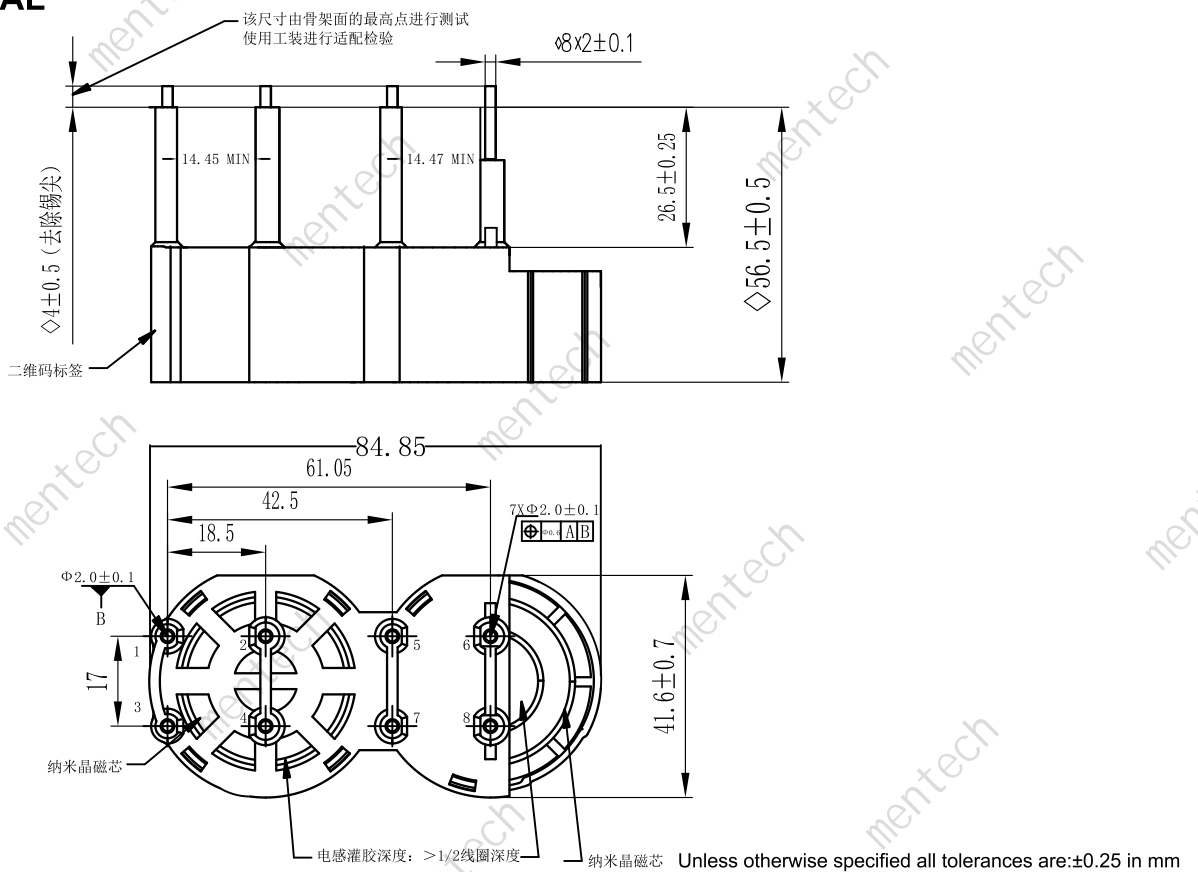


- RoHS Compliant.
- IEC60950 Compatible.
- AEC-Q200 +125°C(Grade1) to be qualified
- Operating temperature range : -40°C to +125°C.
- Storage temperature range(Including self temperature rise) : -40°C to +125°C.

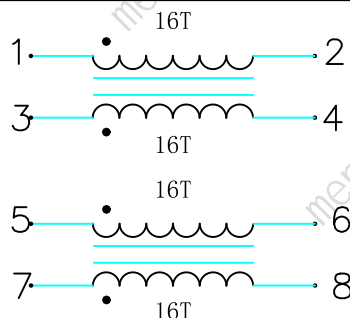


Electrical Specifications @25°C					
Part Number	Turns	OCL (mH) @10KHz, 0. 1V	DCR (mΩ MAX)	HI-POT	
	1-2:3-4:5-6:7-8	1-2=4-3 (5-6=7-8)	1-2=3-4	N1-N2	N3-N4
MGHA-0108G	16:16:16:16±3%	5. 5±30%	4. 5	AC1. 5KV 1mA 60Sec 50HZ	AC1. 8KV 1mA 3Sec 50HZ

MECHANICAL



SCHEMATICS

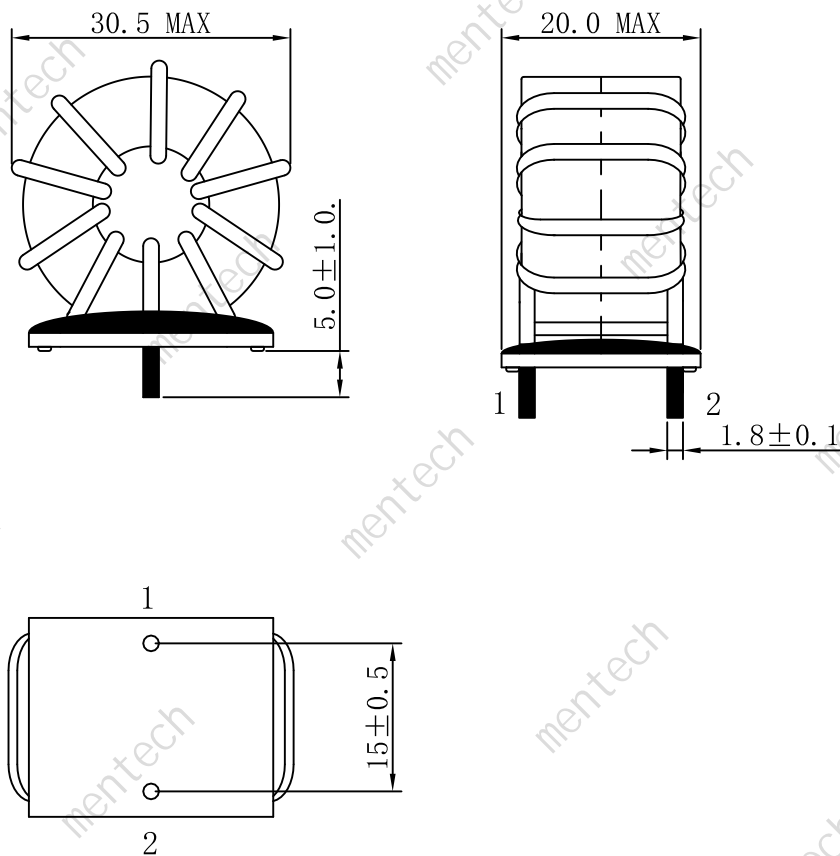


- RoHS Compliant (RoHS6).
- IEC60950 Compliancy.
- Termination finished: Sn-0.7Cu.
- AEC-Q200 Qualifide
- Operating temperature range: -40°C to +125°C.
- Storage temperature range: -40°C to +125°C.



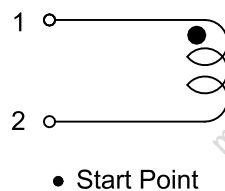
Part Number	TurnsRatio(±3%)	OCL(mH Min) @10KHz,1V	OCL(mH Min) @100KHz,1V	DCR (mΩ Max)
	1-2	1-2	1-2	1-2
MTBA2008DG701U	10	0.7	0.5	3.7

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



Dongguan Mentech Optical & Magnetic Co., Ltd.



(0086)-769-86921000



Block A, No. 157 Dongyuan RD, Shipai, Dongguan, GD, CN

