

Stock code:002902

mentech

LAN Transformer Module Catalog

2023.A3

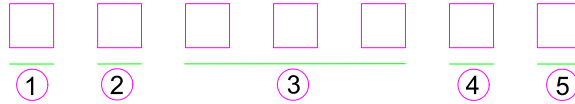
TO DO THE UTMOST FOR CUSTOMERS

Mentech LAN discrete magnetic transformers are designed and manufactured to comply with IEEE802.3 and ANSI X3.263 standards. Products include 10/100 Base-T, 10/100/1000Base-T, 10G Base-T, Power Over Ethernet and ESD/Surge protected transformers modules. These products are widely used in ethernet equipments, broadband terminals, computer, voice and multimedia and so on.

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Definition of Part Number(New)

C Part Name:



C Description

① Product type	H 10/100 Base-T G 100/1000 Base-T Q 2.5G Base-T F 5G Base-T M 10G Base-T
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② Number of pins	A 4 Pin B 6 Pin C 8 Pin D 10 Pin
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③ Schematics Type	101 T+2CMC 102 2CMC+T 103 T+3CMC
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④ Serial Number	1-Z
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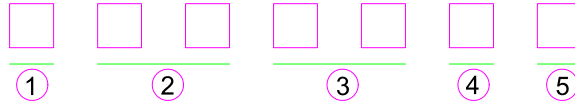
⑤ Mechanical type	A SMT B DIP ...
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Example: HF1011A

HF1011A has the characteristics of a single port, 16pin surface mount , T+2CMC,open header package

Definition of Part Number(Old)

Part Name:



Description

- ① Product type
 - H 10/100 Base-T
 - G 100/1000 Base-T
 - Q 2.5G Base-T
 - F 5G Base-T
 - M 10G Base-T

- ② Number of pins
 - 4 Pin
 - 16 Pin
 -
 -
 -

- ③ Serial Number
 - 1
 - 2
 - 3
 -

- ④ Package
 - D Through Hole
 - C Surface Mount(SMT) Open header type
 - A Surface Mount(SMT) Assembly header type

- ⑤ Extracode
 - G RoHS or Halogen free
 - E Operation Temperature,Industrial Grade



Example: H1601CG

H1601CG has the characteristics of a single port, 16pin surface mount , open header package and halogen free.

Manufacturer	IC	10 Base-T		10/100 Base-T		100/1000 Base-T	
	Part Number	Single	Single	Dual	Quad	Single	Dual
Cirrus Logic	CS8900A-CQ3	T1602CG					
	CS8952		H1601CE				
	CS8952T		H1601CE	H2401CG			
Intel	LXT914 LXT915 LXT916	T1620CG					
	LXT917 LXT918 LXT944	T1621CG					
	82551/2551QM/551ER			H2401CG	H4001CG		
	82559/559ER		H1601CE		H4001CE		
	LXT972		H1606CG				
	82540/ 541/544/543					G2436CG	G4801CG
	82544/545/546/547						G5002CG
	82562						G4830CG
EXAR	82576EB					G2436CG	
	XRT75XXX XRT73L00/2/3/4/6/12	T2401CE					
Agere	XRT73LC03A/04A.R12	T2401CE					
	XRT7300/7302	T2401CE					
	ET901		H1601CG	H2401CG			
	ET908		H1601CG				
	ET1011 ET1012					G2436CG	G4801CG
	ET1081						G5002CG
	ET1310					G2405CG	G4802CG
AMD	ET2005-40/50						G4830CG
	ET2008-30/40/50					G2443CG	
	AM79C874/C875		H1601CG	H2401CG			
Broadcom	AM79C971/C972/C973/		H1601CG				
	AM79C975/C976/C977		H1601CG				
	AC101, AC101L		H1601CG	H2401CG			
	AC104/205/206/207/208					H4001CG	
	AC131		H1602CG			H4001CG	
	BCM1190		H1601CG				
	BCM5241		H1601CG			H4001CG	
	BCM5220/ 5221		H1601CG				
	BCM5222		H1602CG				
	BCM1100/110/		H1606CG				
	BCM6345/6348		H1602CG				
	BCM5350/5380		H1601CG				
	AC104, BCM5208R		H1601CG				
	BCM5315/5325(M)		H1601CE			H4001CE	
	BCM5225/26/27		H1601CG			H4807CG	
	AC207/208		H1606CG				
	BCM5400, BCM5401						G2413CG
	BCM5411/21/21S						
	BCM5460/61/81						G2405CG
	BCM5701/02/03/04/05						G2443CG
	BCM5461S						G2497AG
	BCM5789						G2411CG
	BCM1100/110/AC104, BCM5208R						G2413CG
	AC1011/1012						G2497AG
	AC131 BCM5220/5221						G2456CG
	Infineon ADM7001						G2456CG
	Davicom	DM9000/A		H1601CE	H2401CG		
DM9102A/D			H1601CG				
DM9601			H1601CE				
DM9301/9331			H1606CG				
ICS	ICS1890/1891		H1601CG				
	ICS1893					G2413CG	
IC+	3097-F, 3299A			H2401CG	H4001CG		
	IP100A		H1601CE				
	IP108		H1601CE			H4001CE	
	IP1726					H4807CG	

Manufacturer	IC	10 Base-T		10/100 Base-T		100/1000 Base-T	
	Part Number	Single	Single	Dual	Quad	Single	Dual
Infinion	ADM8511/8513/9511		H2401CG				
	ADM9513, AN983B		H1601CG	H2422CG			
	ADM7001		H1601CG				
	ADM6305				H4001CG		
	AN985B/L_autoMDX					G2413CG	
	ADM7001					G2456CG	
Luminary Micro	LM3S6938		H1601CG				
	LM3S8962		H1606CG				
LSI	L80223		H1601CG	H2401CG			
	L80227		H1606CG				
	L80600					G2413CG	G4801CG
	L80601					G2497AG	
Marvell	88E6021			H2401CG	H4001CG		
	88E6060/88E6218		H1601CE		H4001CE		
	88E6052,88E6063		H1606CG		H4807CG		
Marvell Semiconductor	88E1010/1011S					G2436CG	G4801CG
	88E1111/12/14/18/19						G5002CG
	88E1040/1040S/1041						G4830CG
	88E1041S/1042/1042S					G2443CG	
MICREL	KS8721B/21BL/37		H1601CG	H2401CG			
	KS8737		H1601CG				
	KSZ8893		H1606CG				
	KS8995/95M/95MA/95E		H1606CG				
	KS8737					G2413CG	
Micre	KS9020					G2436CG	G4801CG
Microchip	PIC18F87J50		H1601CG				
	ENC28J60		H1601CG				
MicroLinear	ML6652		H1601CG				
Myson	MTD971		H1601CG	H2401CG			
	MTD981		H1601CG				
Mysticom	MystiPHY110		H1601CE				G4801CG
Mysticom	MY1001					G2497AG	G5002CG
National Semiconductor	DP83847		H1601CG	H2401CG			
	DP83848/C		H1636CG				
	DP83816 (macphyter II)		H1601CE				
Realtek	RTL8100C/101L/100B		H1601CG	H2401CG			
	RTL8150			G2413CG			
	RTL8019AS		H1601CE				
	RTL8181/86		H1606CG				
	RTL8208		H1601CG		H4001CG		
	RTL8316				H4001CG		
	RTL8211/12					G2436CG	G4801CG
	RLT8169						G5002CG
SIS	RTL8150		H1601CG			G2413CG	
SIS	SiS900		H1606CG				
	LAN83C183/185		H1601CG	H2401CG			
	LAN8187					G2443CG	
SMSC	LAN91C111	H1606CG					
	DP83865					G2436CG	G4801CG
	DP83864					G2497AG	G5002CG
National Semiconductor	DP83640					G2443CG	
	VSC8201/8211					G2436CG	G4801CG
	VSC8221/8601/8641					G2497AG	G5002CG
	VSC8204/24/34/44					G2401CG	
	VSC8558/8538					G2443CG	
	VSC7380/7384					G2411CG	
Vitesse Semiconductor	VSC7388/7398						G4802CG

- Ⓢ Meets IEEE 802.3u & ANSI X 3.263 Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10/100 Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.

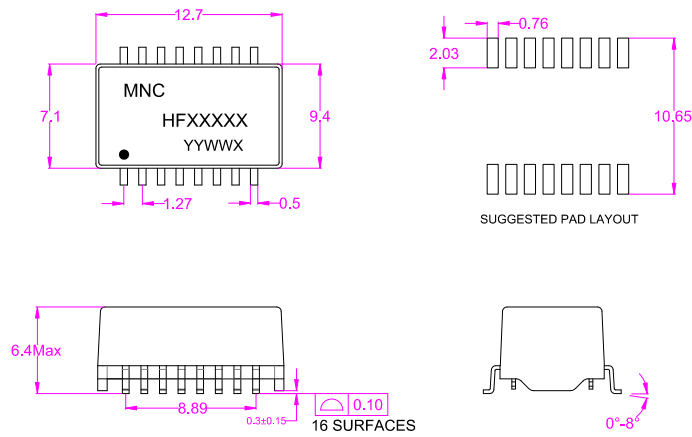


Electrical Specifications @25°C

Part Number	OCL(μH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	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	0.5-100MHz			
HFXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500		

MECHANICAL

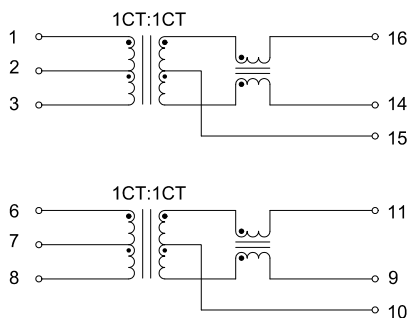
HF1011A HF1016A HF1021A



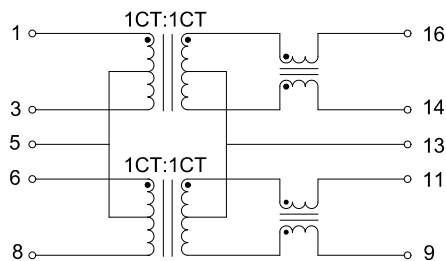
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

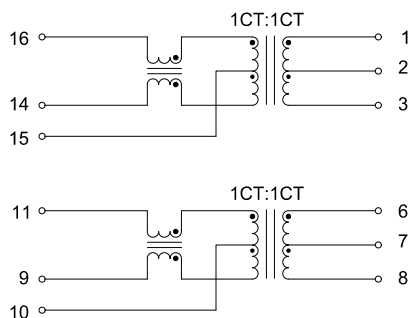
HF1011A



HF1016A



HF1021A



- Meets IEEE 802.3u & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

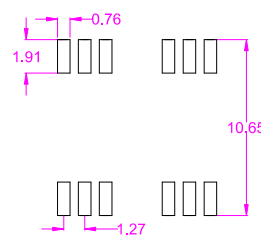
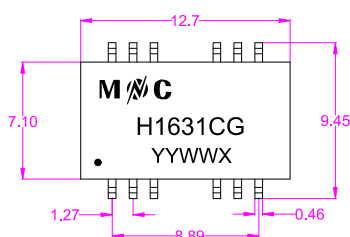


Electrical Specifications @25°C

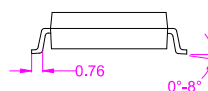
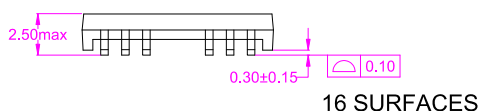
Part Number	OCL(uH) 100KHz,0.2Vrms,	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
H16XXXX	350uH	1CT:1CT	-1,1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

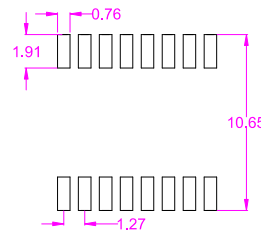
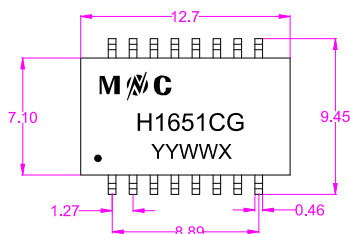
H1631CG



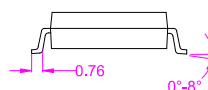
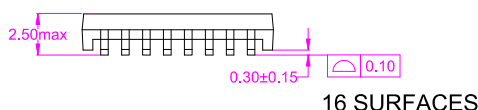
SUGGESTED PAD LAYOUT



H1651CG



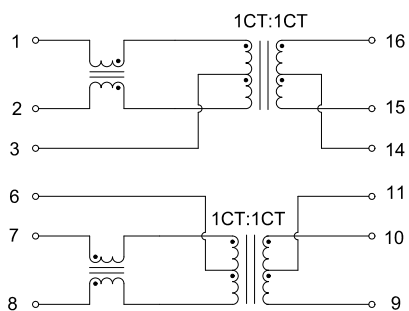
SUGGESTED PAD LAYOUT



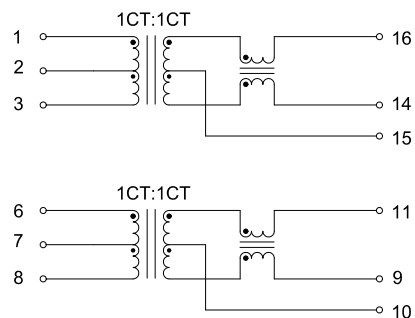
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

H1631CG



H1651CG



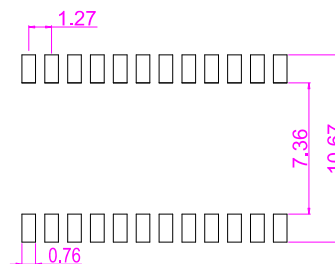
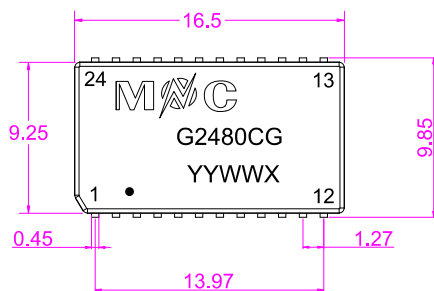
- Meets IEEE 802.3ab & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100/1000 Base-T, Surface Mount Type.
- Operating temperature range: 0°C to +70°C.



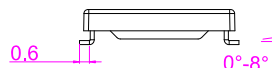
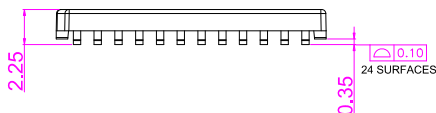
Electrical Specifications @25°C

Part Number	OCL(μH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	40.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
G2480CG	350	1CT:1CT	-1.1	-18	-12+20*log(f/80)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

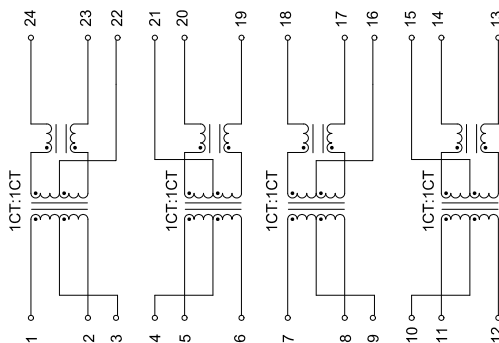


SUGGESTED PCB PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



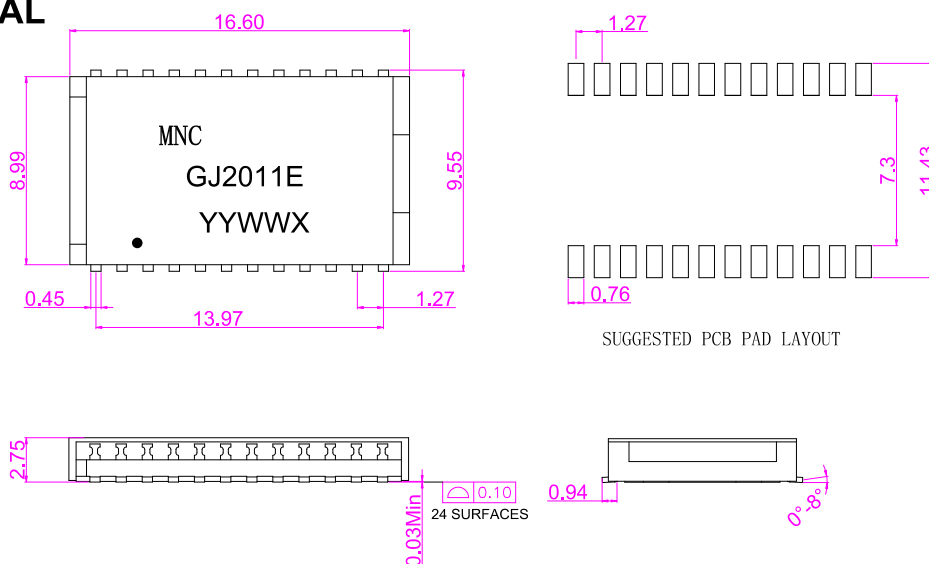
- Meets IEEE 802.3ab Standards.
- RoHS Compliant.
- 10/100/1000 Base-T, Surface Mount Type, Assembly Header.
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	40.1-100MHz	40.1-100MHz	0.5-40MHz	40.1-100MHz		
GJ2011E	350	1CT:1CT	-1.1	-18	-12+20*log(f/80)	-35	-33+20*log(f/50)	-30	1500	

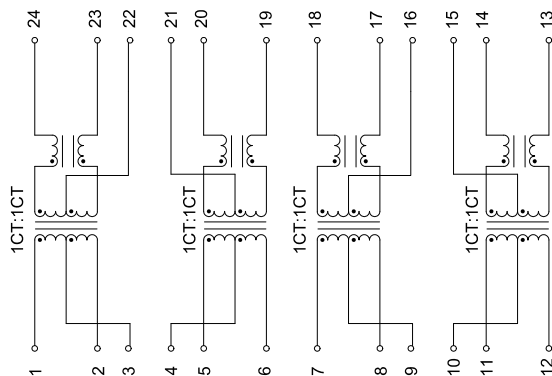
MECHANICAL



SUGGESTED PCB PAD LAYOUT

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



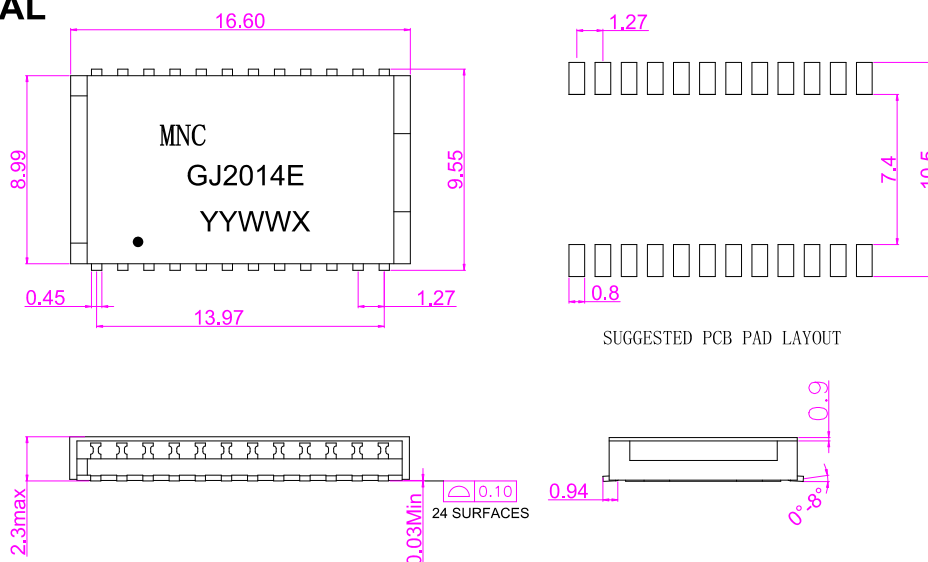
- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10/100/1000 Base-T, Surface Mount Type, Assembly Header.
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	40.1-100MHz	0.5-40MHz	40.1-100MHz		
GJ2014E	350	1CT:1CT	-1.1	-18	-12+20*log(f/80)	-35	-33+20*log(f/50)	-30	1500

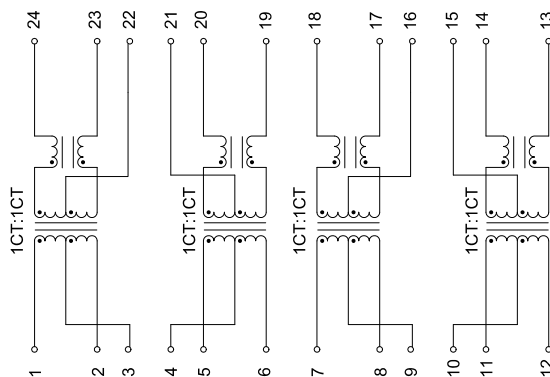
MECHANICAL



SUGGESTED PCB PAD LAYOUT

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.

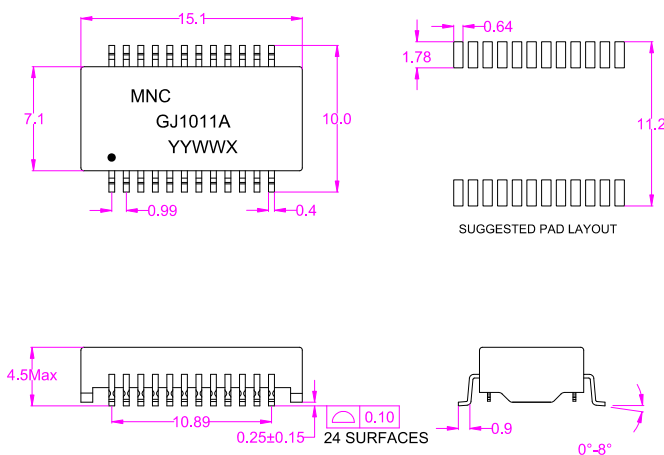


Electrical Specifications @25°C

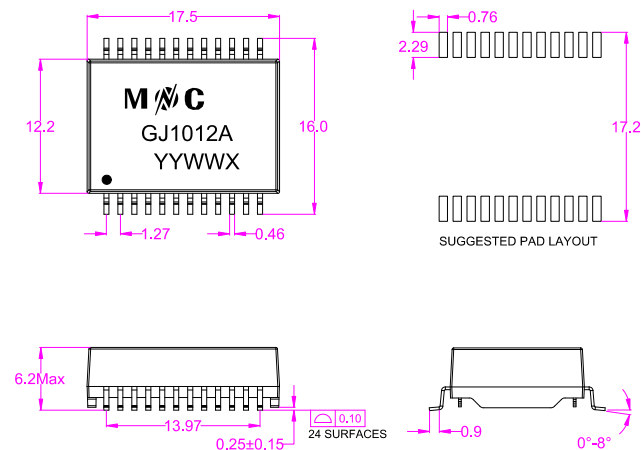
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
				0.5-100MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GJXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

GJ1011A

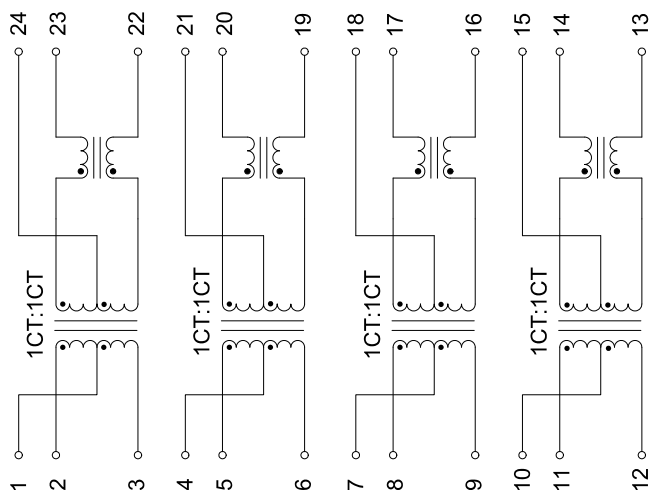


GJ1012A



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.

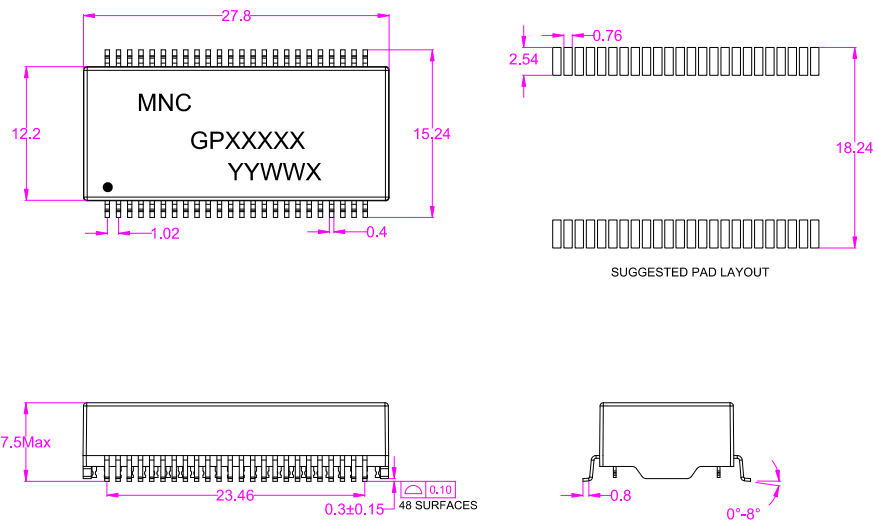


Electrical Specifications @25°C

Part Number	OCL(μH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10,1-100MHz	0.5-40MHz	40,1-100MHz				
GPXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

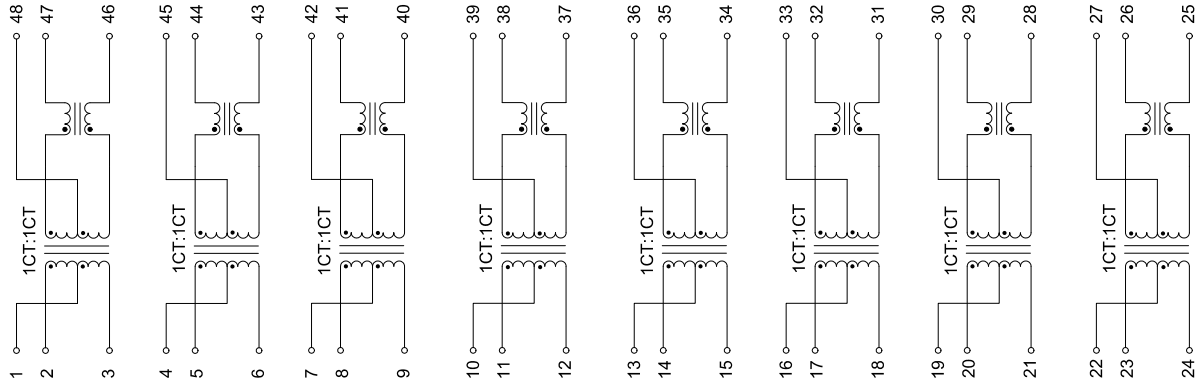
GP1011A ,GP1061A



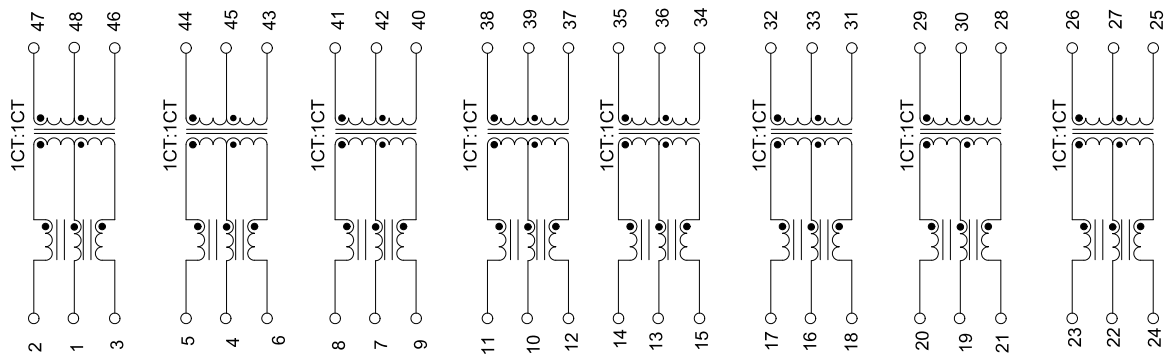
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

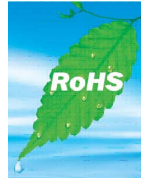
GP1011A



GP1061A

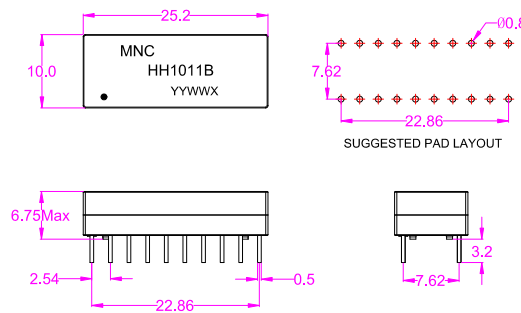


- Ⓢ Meets IEEE 802.3u & ANSI X3.263 Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10/100 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



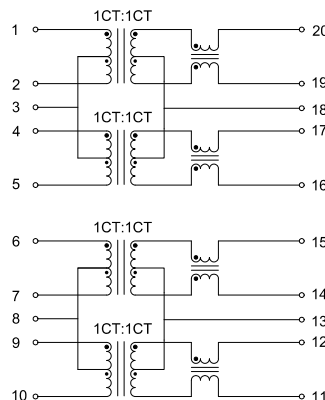
Electrical Specifications @25°C										
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz			0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
HH1011B	350uH	1CT:1CT	-1,1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



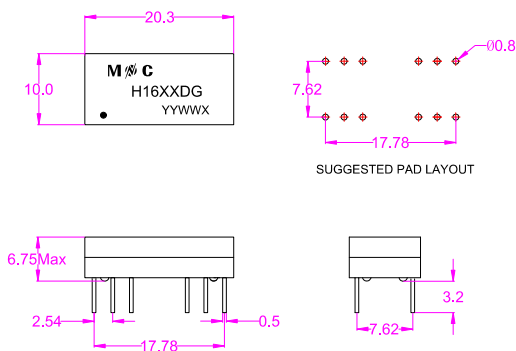
- ☉ Meets IEEE 802.3u & ANSI X3.263 Standards.
- ☉ RoHS Compliant.
- ☉ 10/100 Base-T, Through-Hole Type .
- ☉ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	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		
HF1011B	350uH	1CT:1CT	-1,1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500

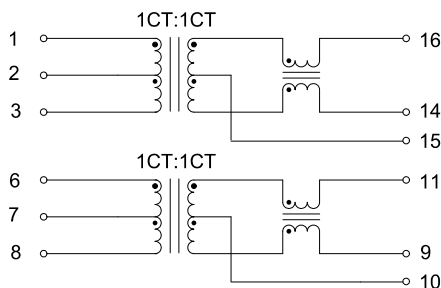
MECHANICAL



NOTE: PIN 4,5,12,13 cut off

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

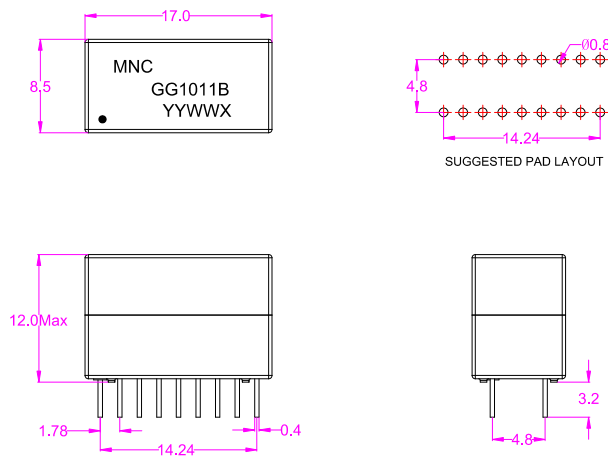


- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



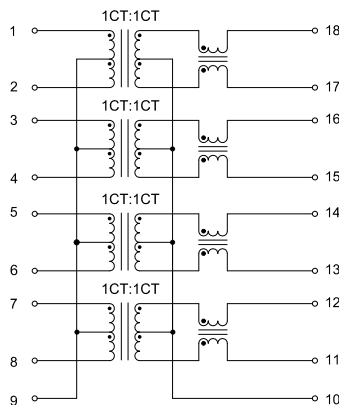
Electrical Specifications @25°C										
Part Number	OCL(μH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
				0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GG1011B	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

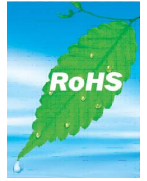


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



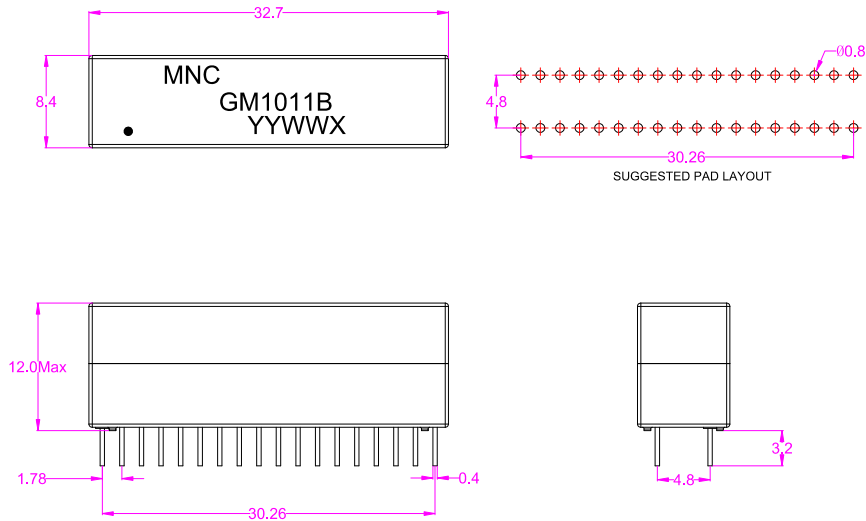
- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

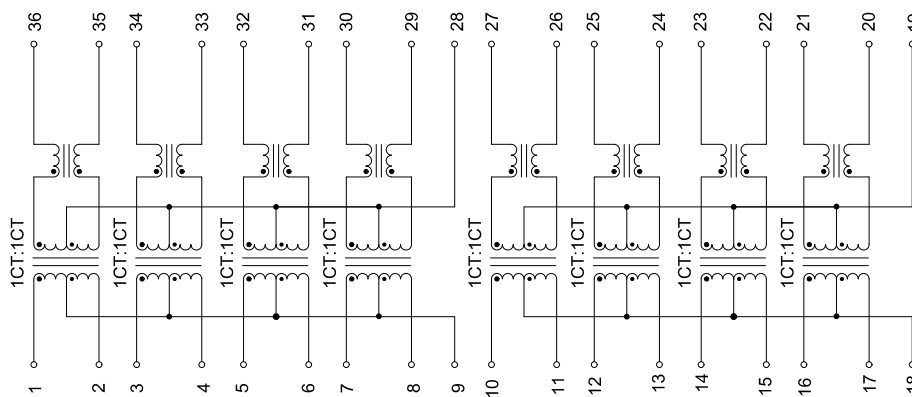
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
GM1011B	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



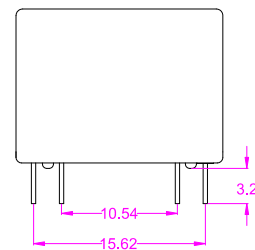
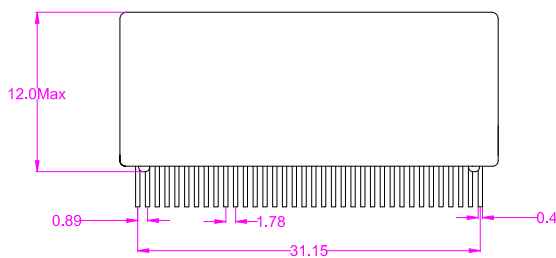
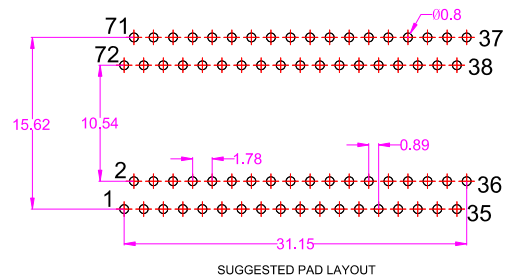
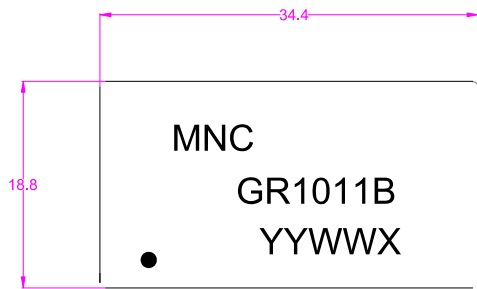
- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



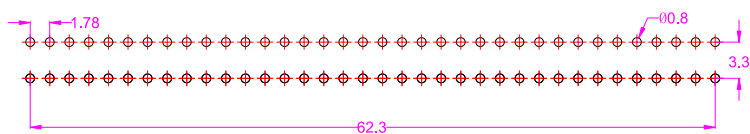
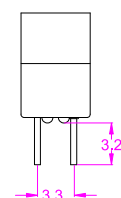
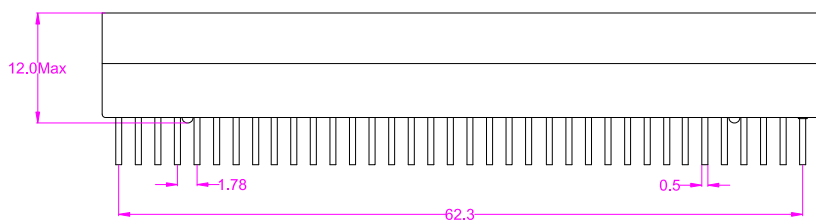
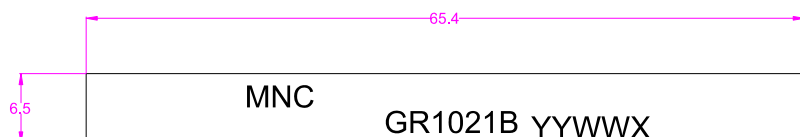
Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
GRXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



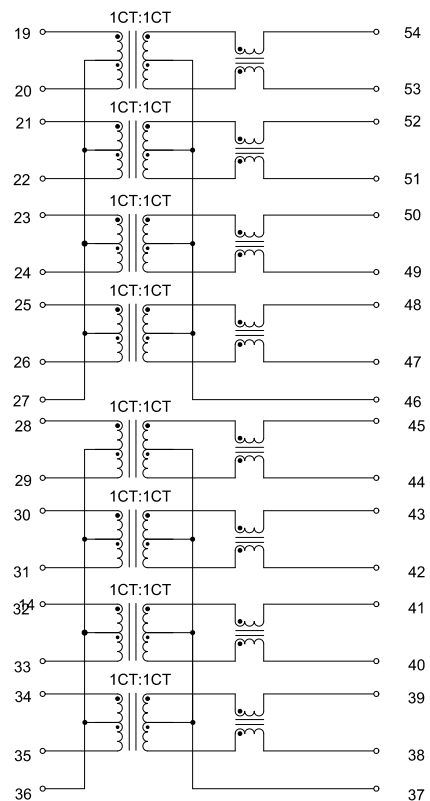
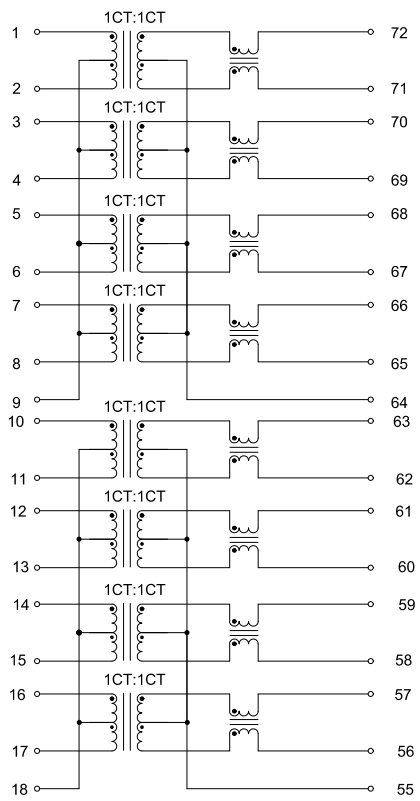
Unless otherwise specified all tolerances are: ±0.25 in mm



SUGGESTED PAD LAYOUT

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



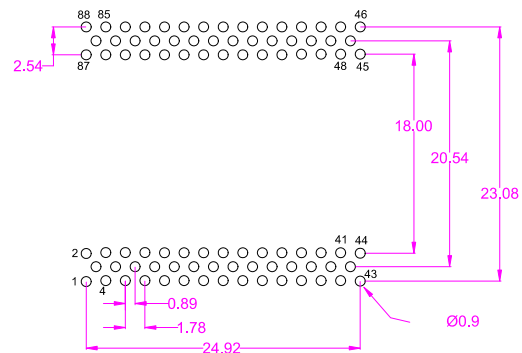
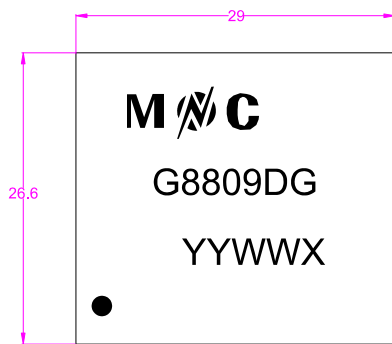
- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



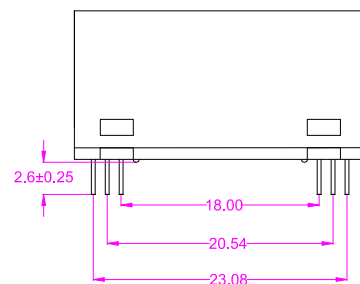
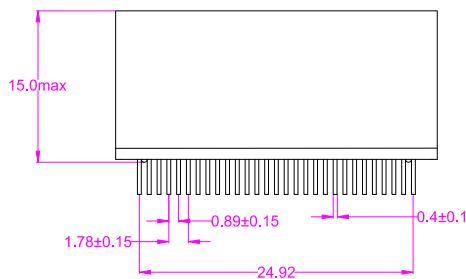
Electrical Specifications @25°C

Part Number	OCL Pri(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)	HI-POT (Vrm)
			0.5-100MHz	0.5-40MHz	40.1-100MHz	0.5-40MHz	40.1-100MHz			
G8809DG	350	1CT:1CT	-1.1	-18	-12+20log(f/80)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

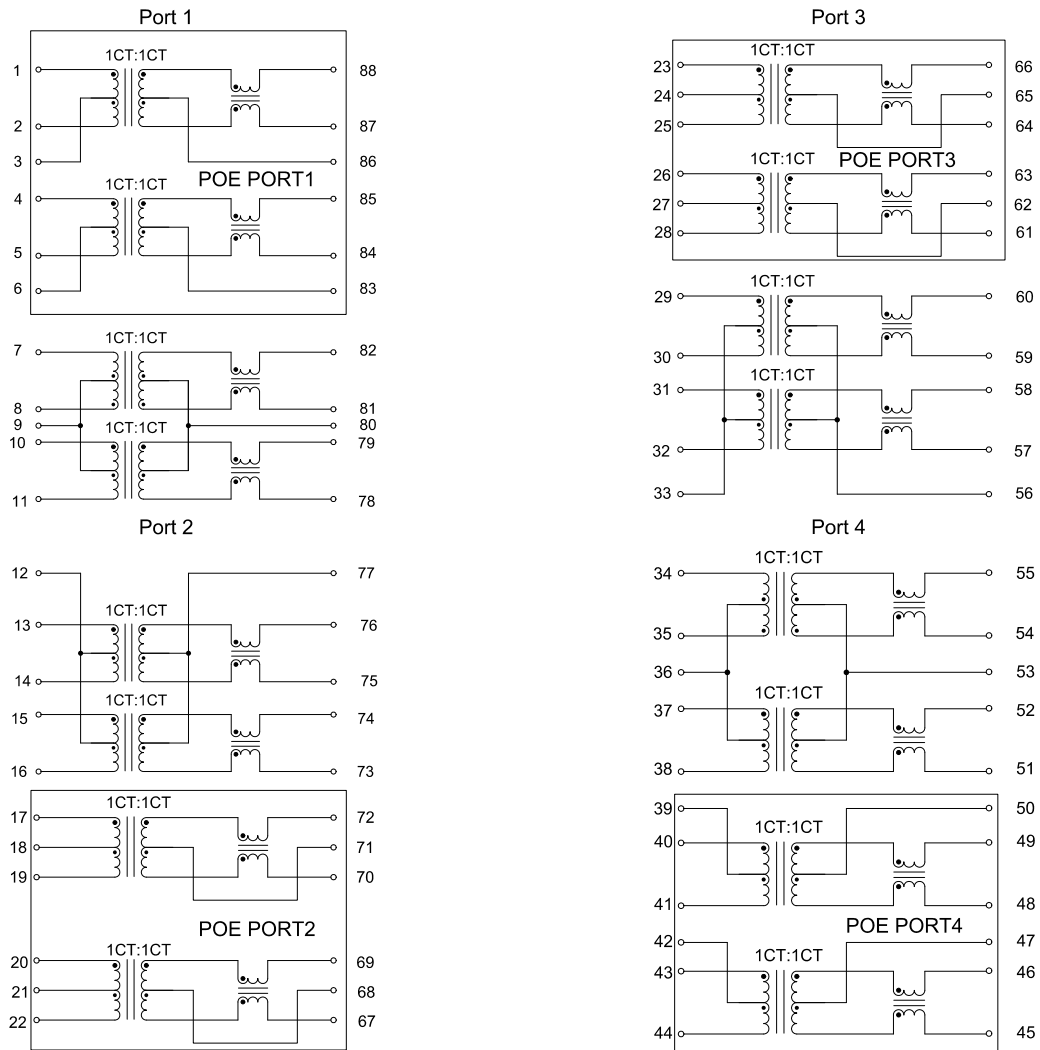


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



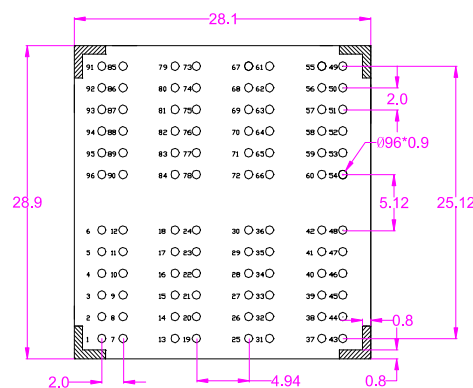
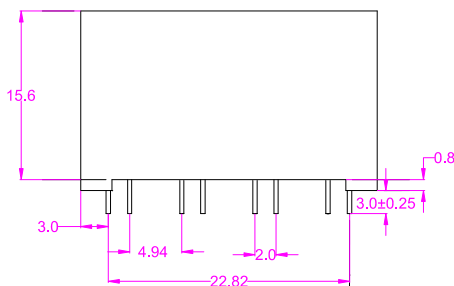
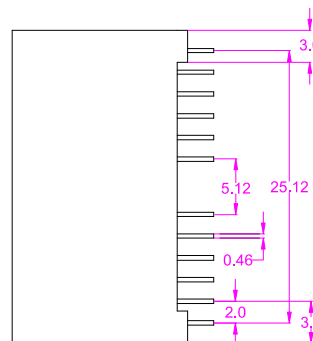
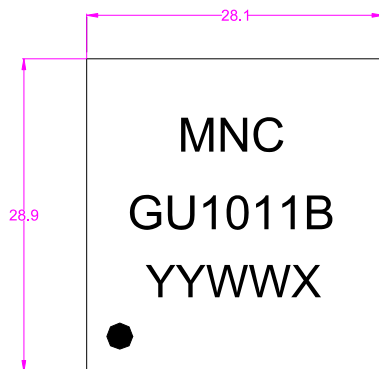
- Ⓢ Meets IEEE 802.3ab Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH)	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	100KHz,0.1Vrms, With 8mA DC Bias			0.5-100MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GU1011B	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

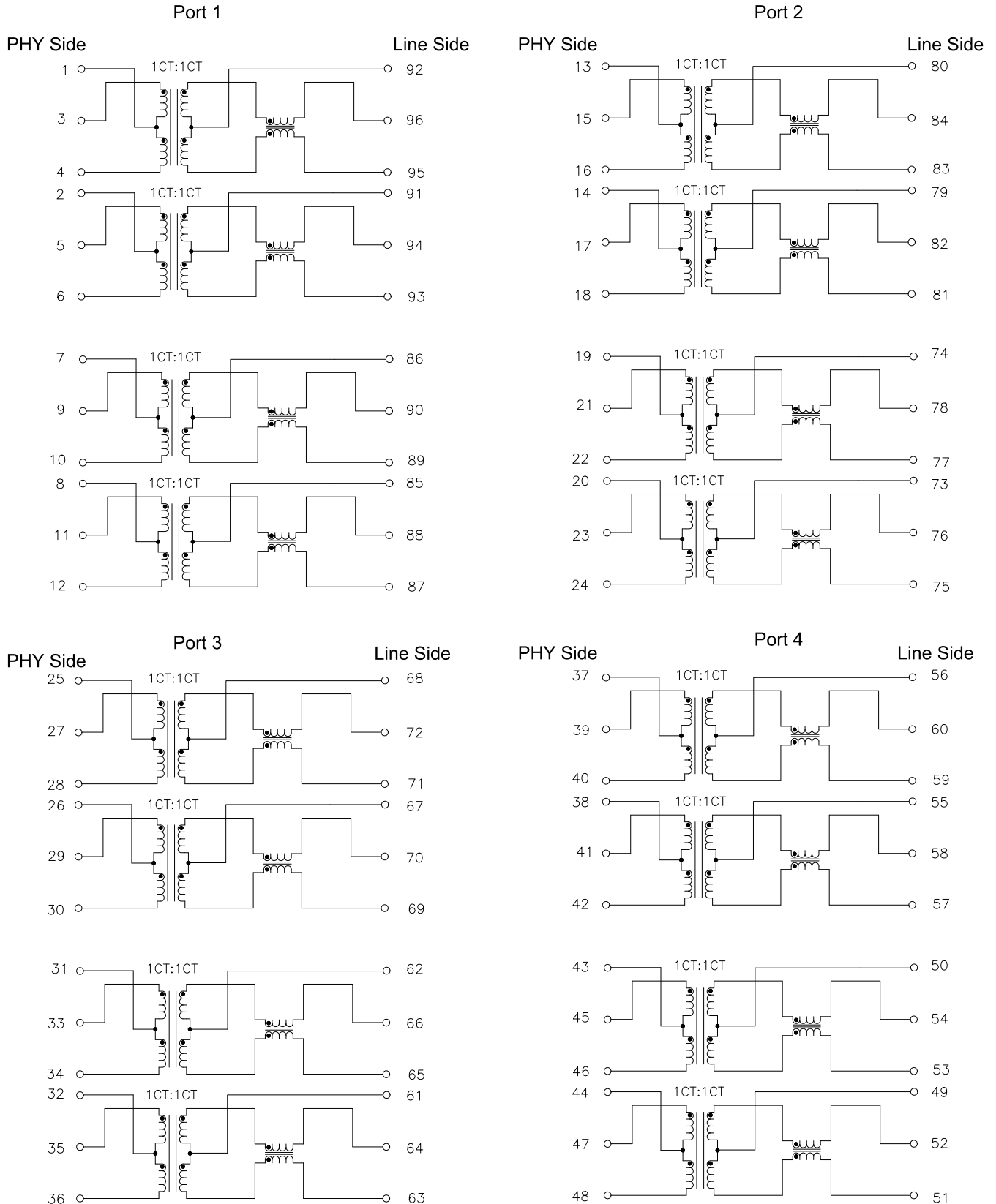
MECHANICAL



NO COMPONENT AREA.
Suggested Customer PCB Layout
(Component Side)

Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

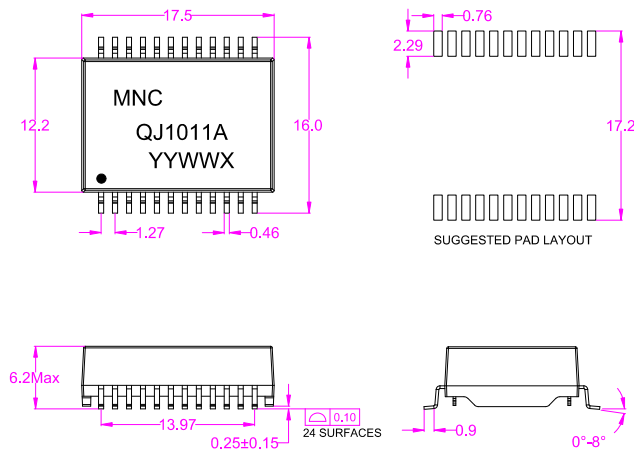


Electrical Specifications @25°C

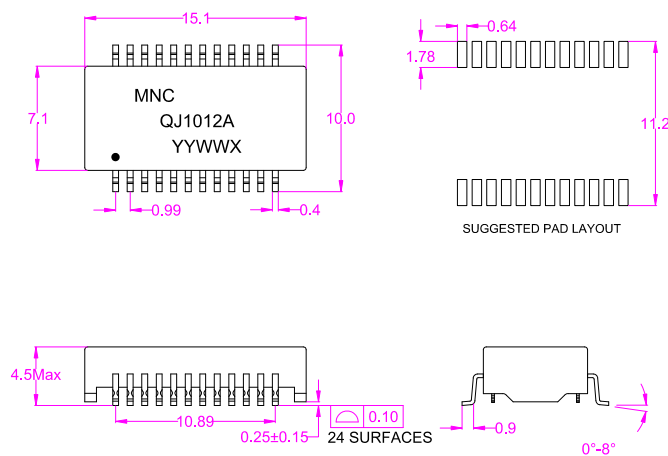
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QJXXXXX	150	1CT:1CT	-1	-2	-16	$-16+10*\log(f/40)$	-48	$-44+19.2*\log(f/50)$	$-43.1+20*\log(f/100)$	1500

MECHANICAL

QJ1011A

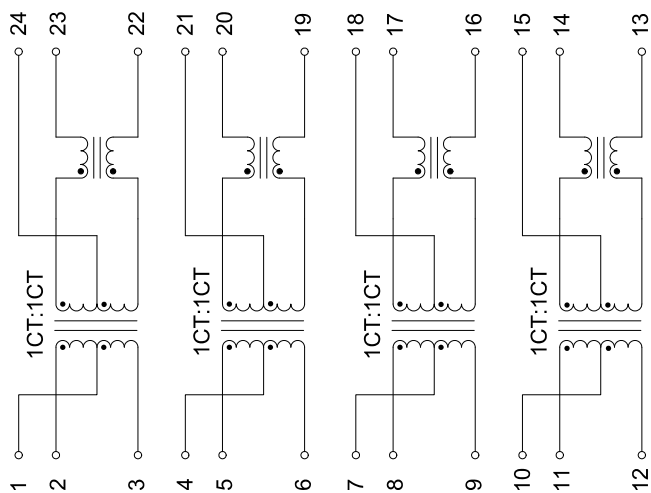


QJ1012A



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

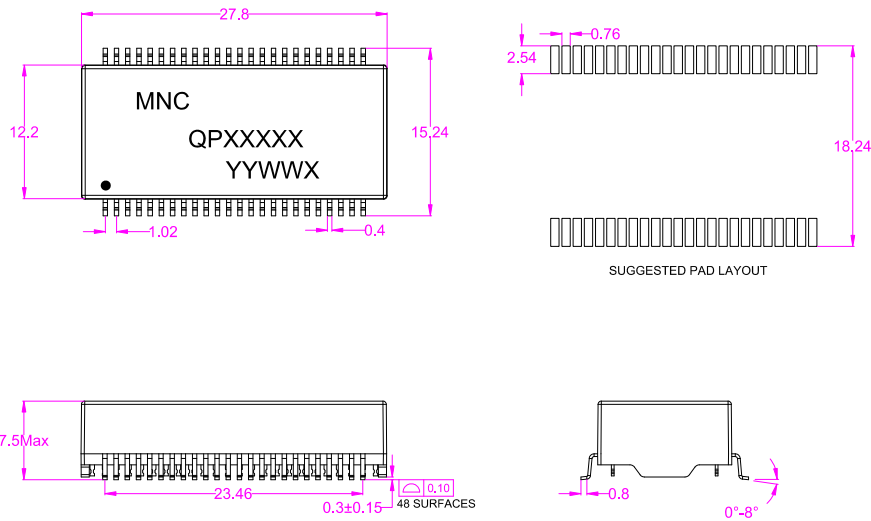


Electrical Specifications @25°C

Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QPXXXXX	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL

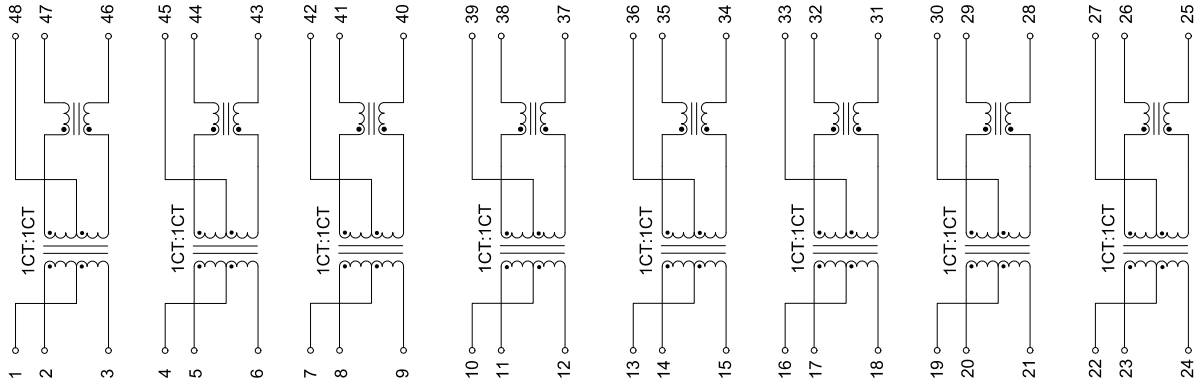
QP2011A, QP1041A



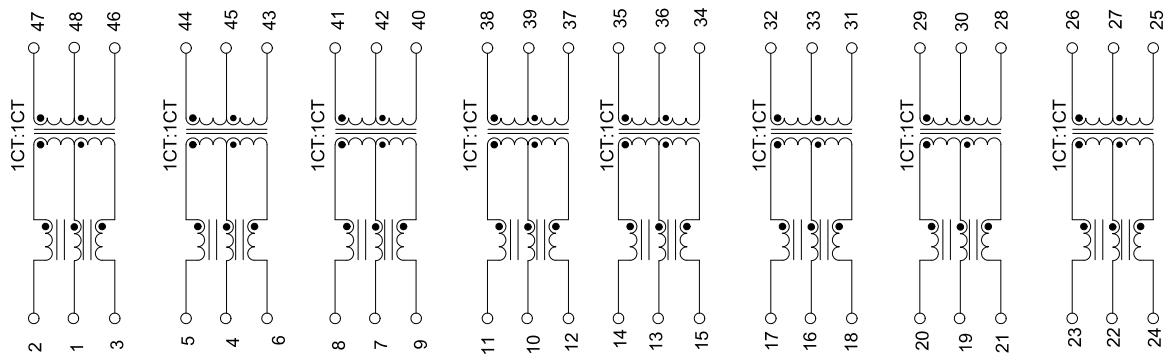
Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

GP1011A



GP1041A



- Ⓢ Meets IEEE 802.3bz Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 5G Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.

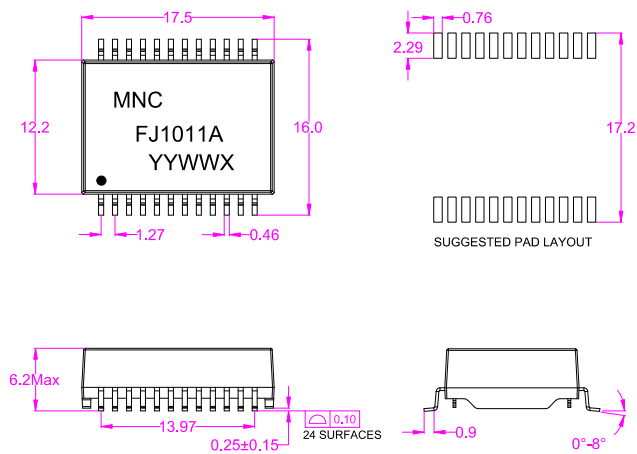


Electrical Specifications @25°C

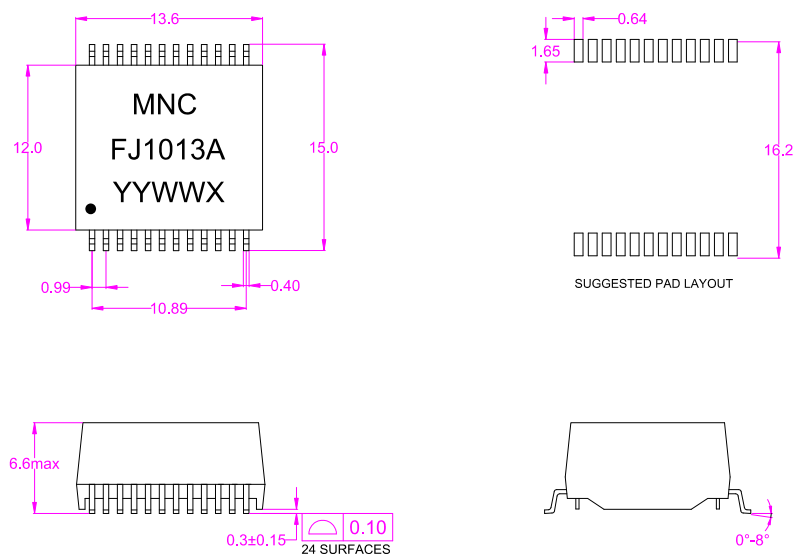
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FJXXXXX	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL

FJ1011A



FJ1013A



Unless otherwise specified all tolerances are:±0.25 in mm

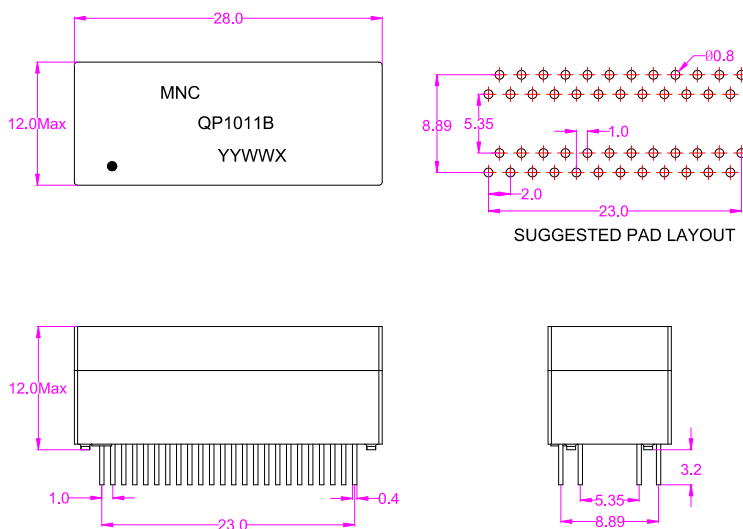
- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 2.5G Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

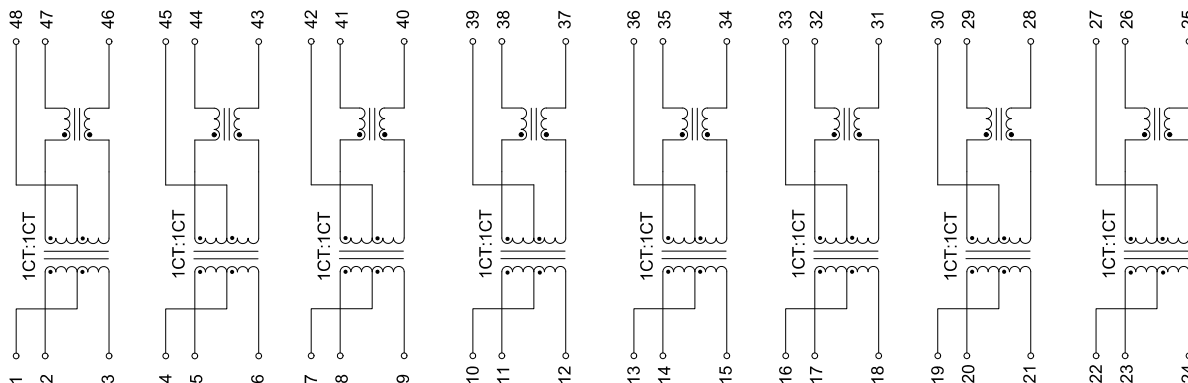
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QP1011B	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL

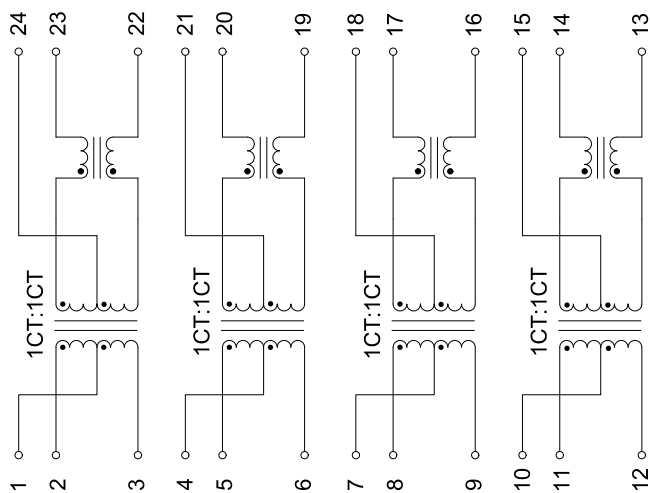


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



SCHEMATICS



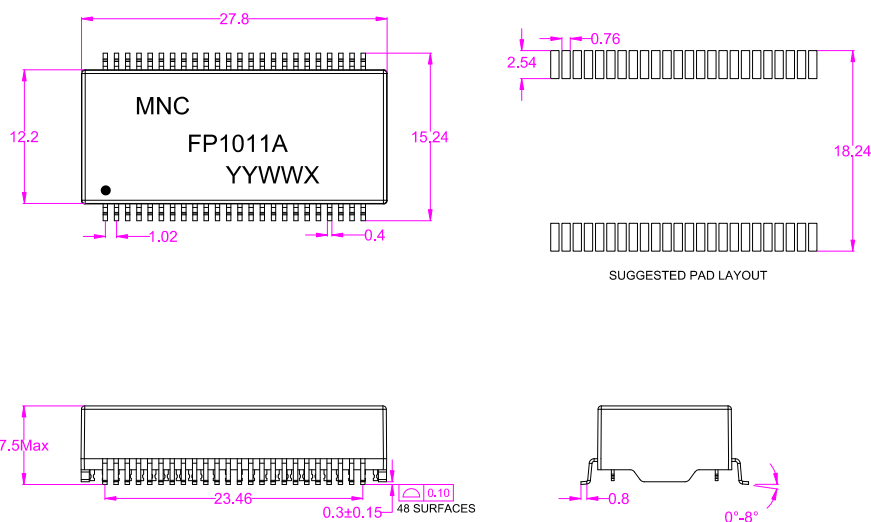
- Ⓢ Meets IEEE 802.3bz Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 5G Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

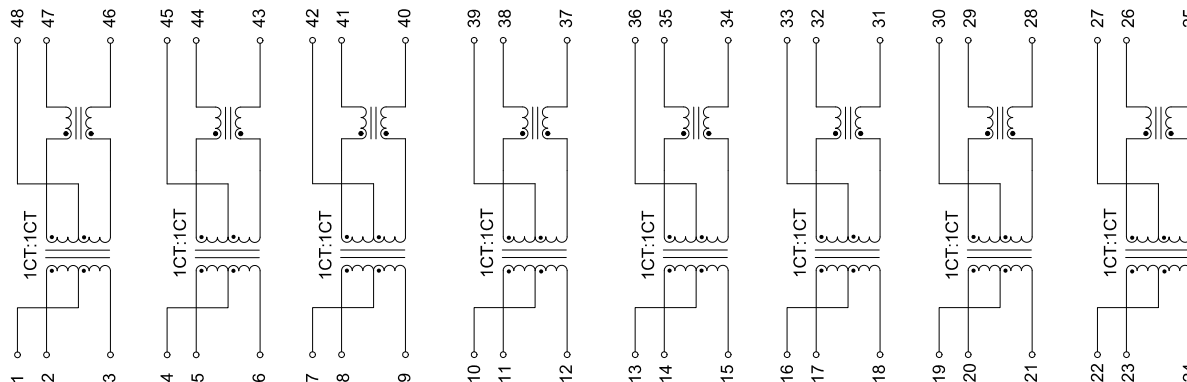
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FP1011A	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



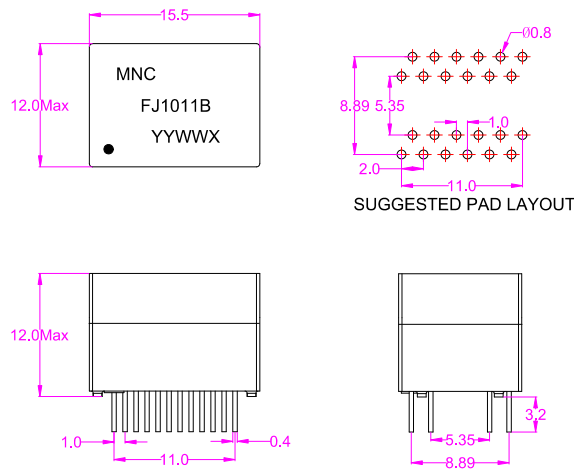
- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 5G Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

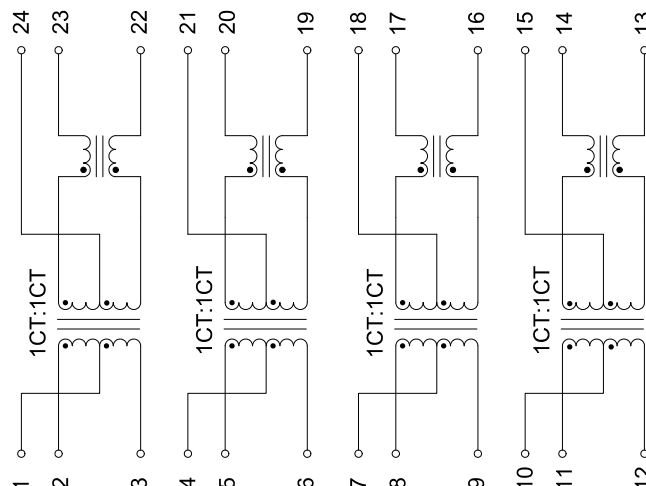
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FJ1011B	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL

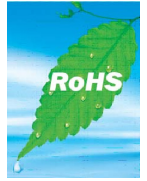


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



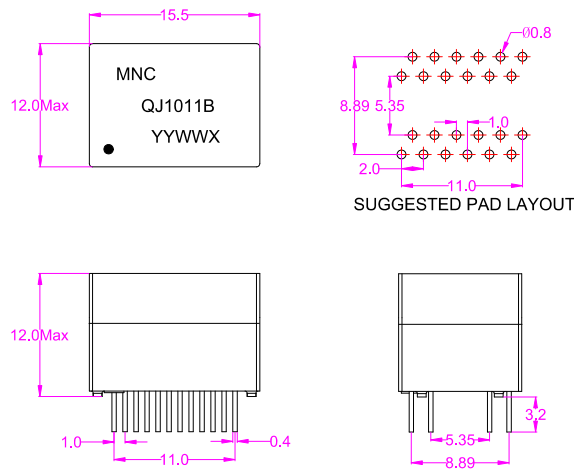
- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 2.5G Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

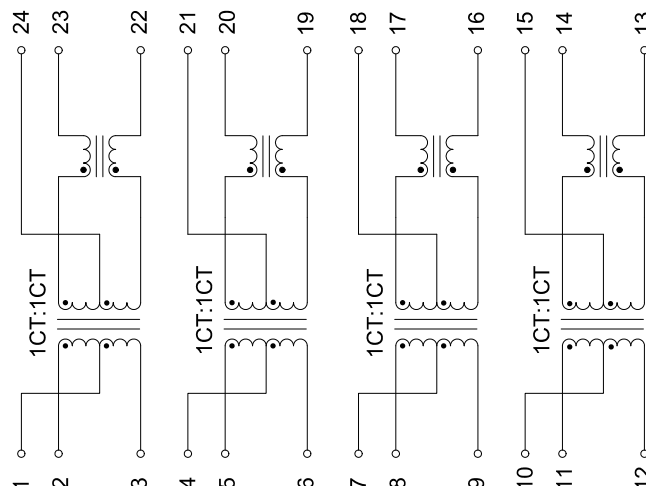
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QJ1011B	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



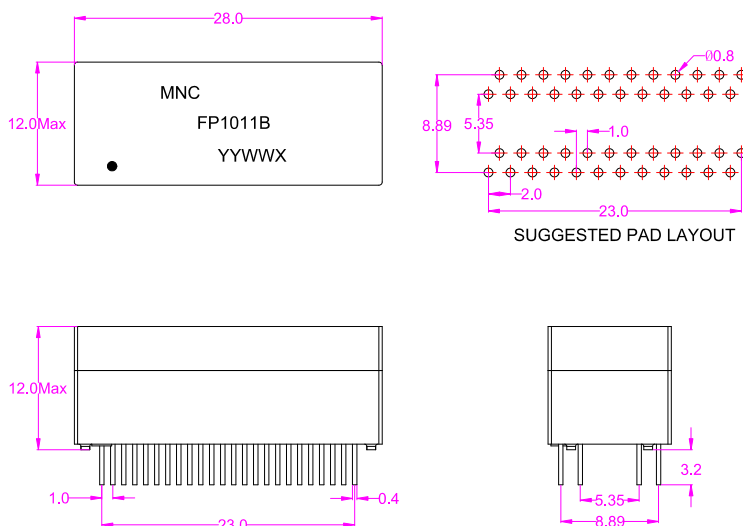
- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 5G Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

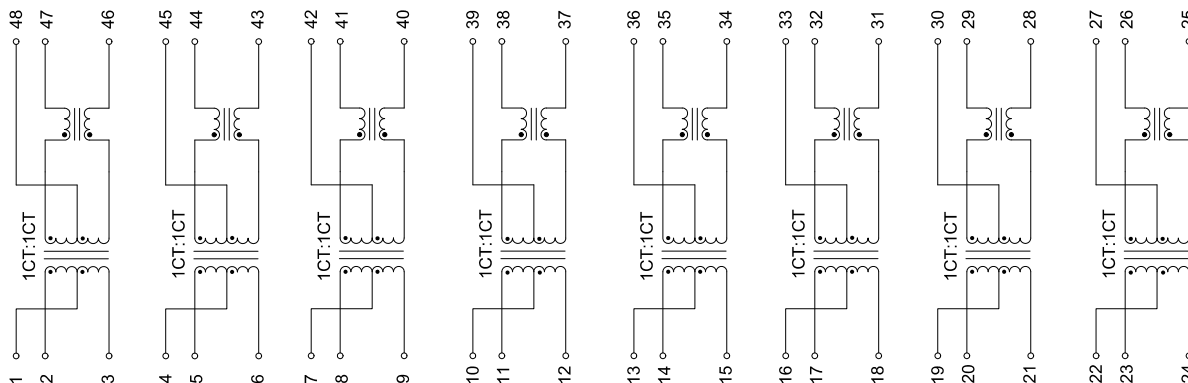
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FP1011B	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

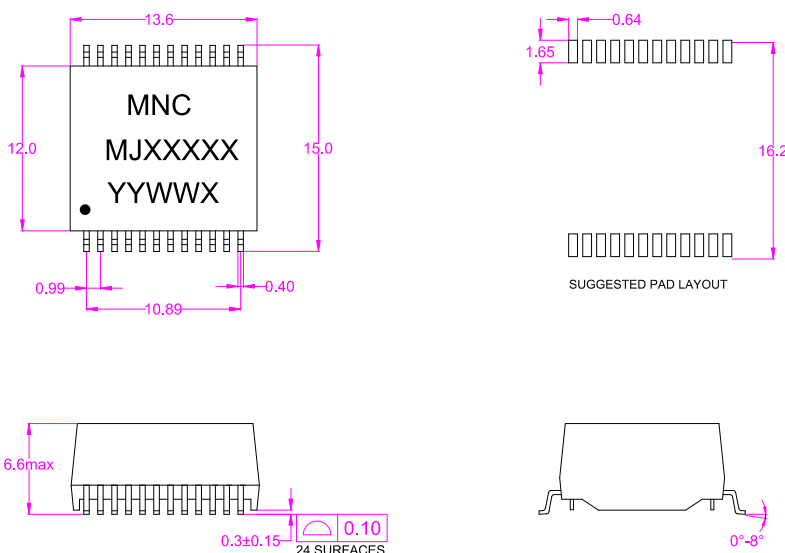


Electrical Specifications @25°C

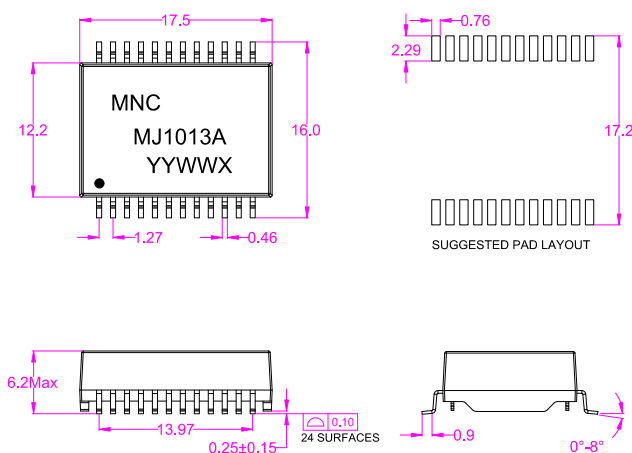
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MJXXXXX	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL

MJ1011A, MJ1041A



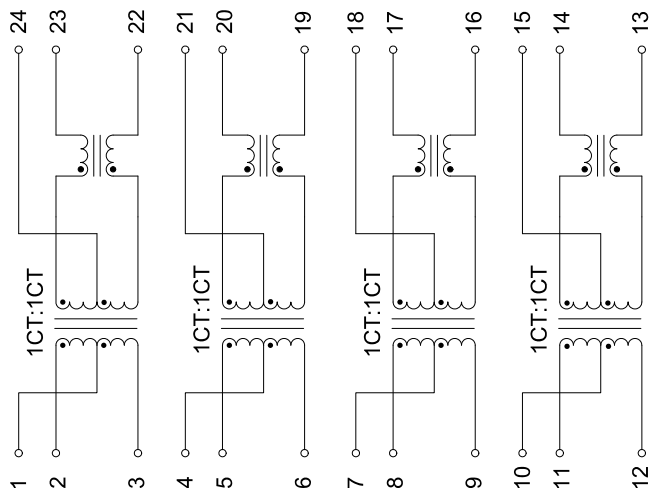
MJ1013A



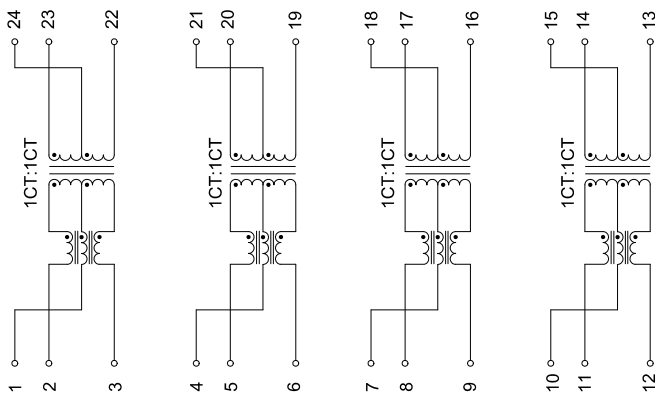
Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

MJ1011A,MJ1013A



MJ1041A

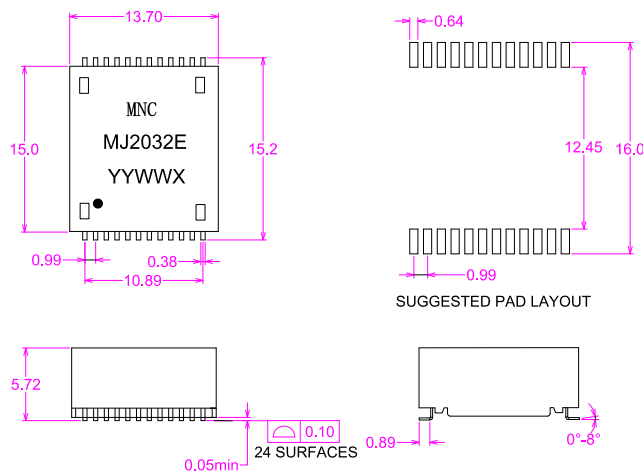


- Ⓢ Meets IEEE 802.3an Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10G Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.



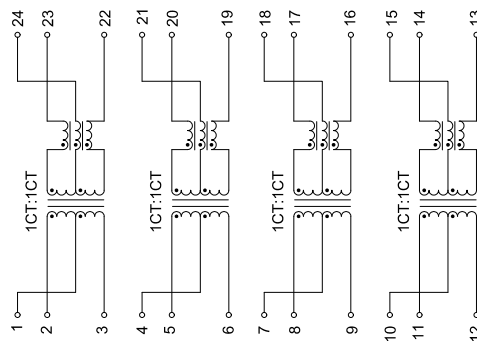
Electrical Specifications @25°C														
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (MAX)		Return Loss (MIN)		Common to Differential Mode Rejection (MIN)		Cross talk (MIN)		Common Mode Rejection Ratio (MIN)			Hi-Pot (Vrms) 60s
			100KHz	1-500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	1-100MHz	100-300MHz	300-500MHz	
MJ2032E	200uH	1CT:1CT	-3.0	-1.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	-35	-30	-25	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



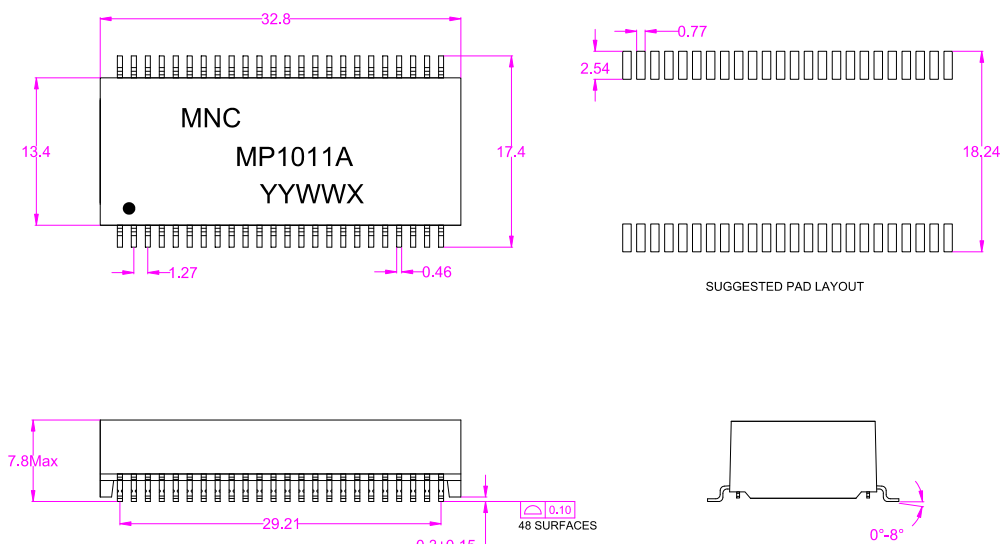
- Ⓢ Meets IEEE 802.3an Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10G Base-T, Surface Mount Type, Open Header .
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

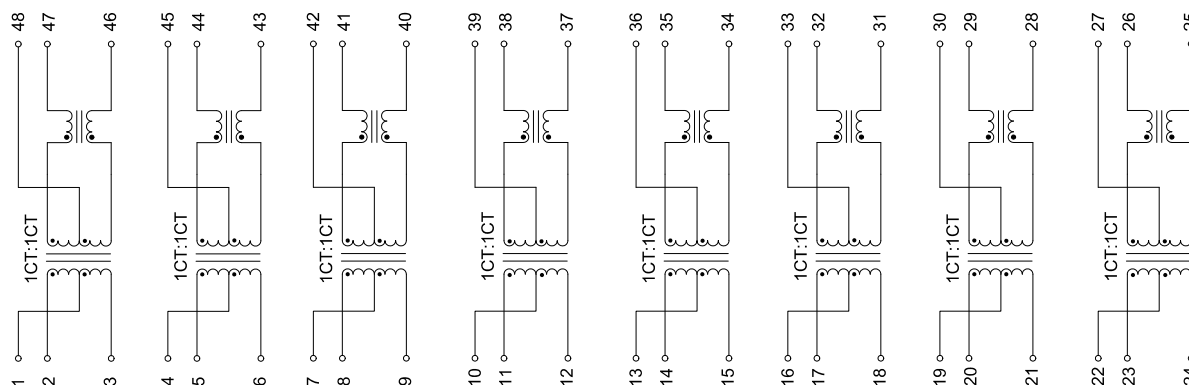
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MP1011A	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



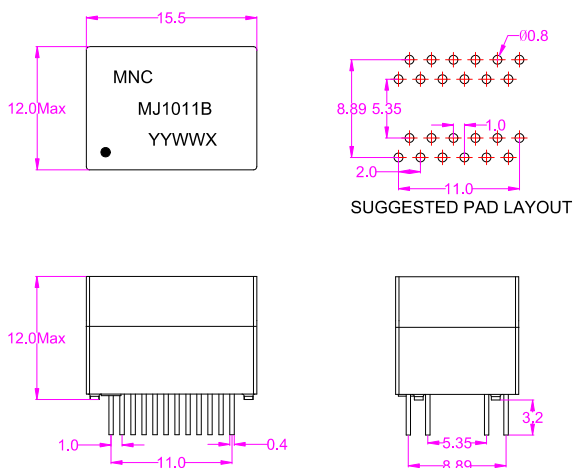
- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

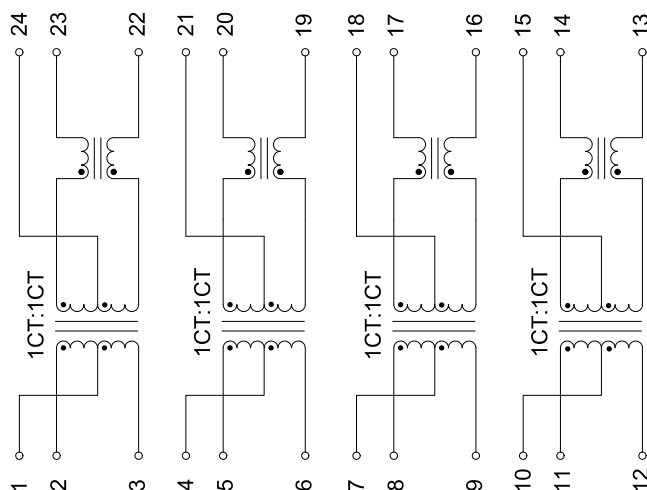
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MJ1011B	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



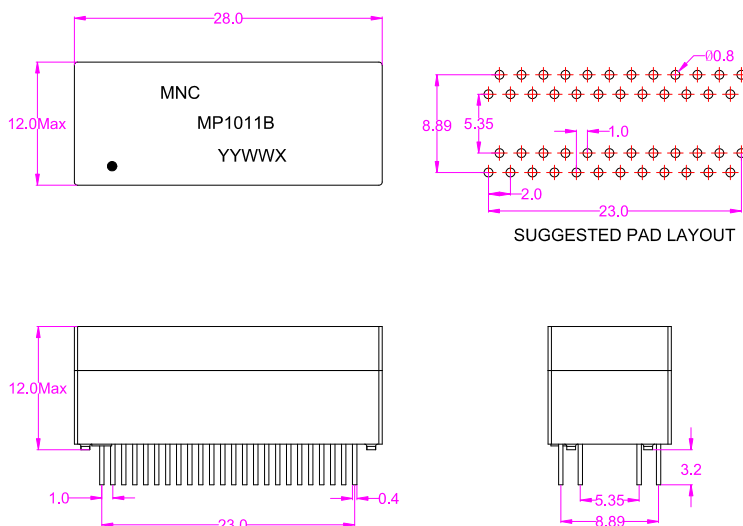
- Ⓢ Meets IEEE 802.3an Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 10G Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

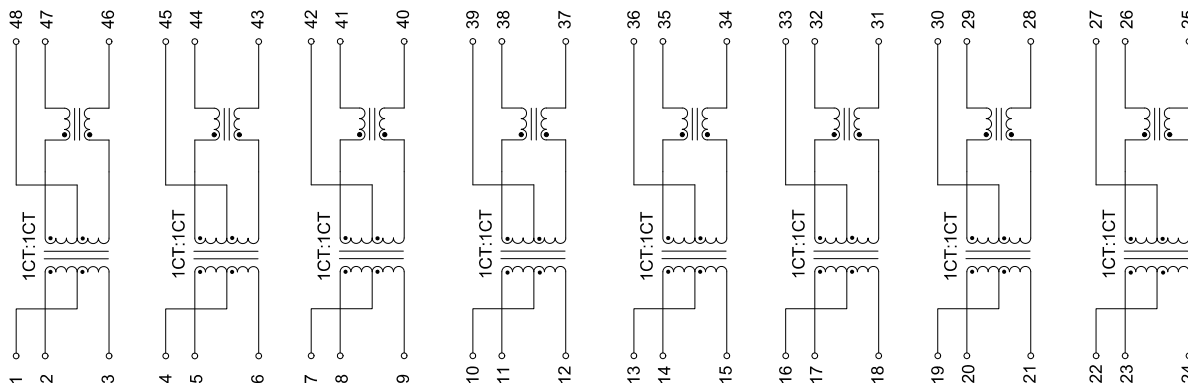
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MP1011B	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



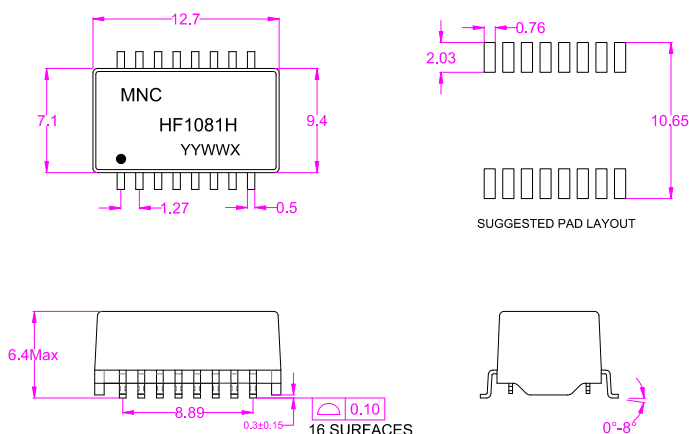
- Meets IEEE 802.3u & 802.3af Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

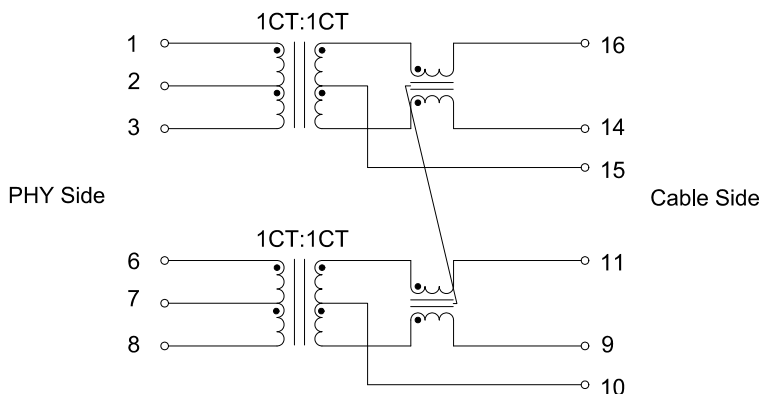
Part Number	OCL(μ H) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio ($\pm 5\%$)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
HF1081H	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



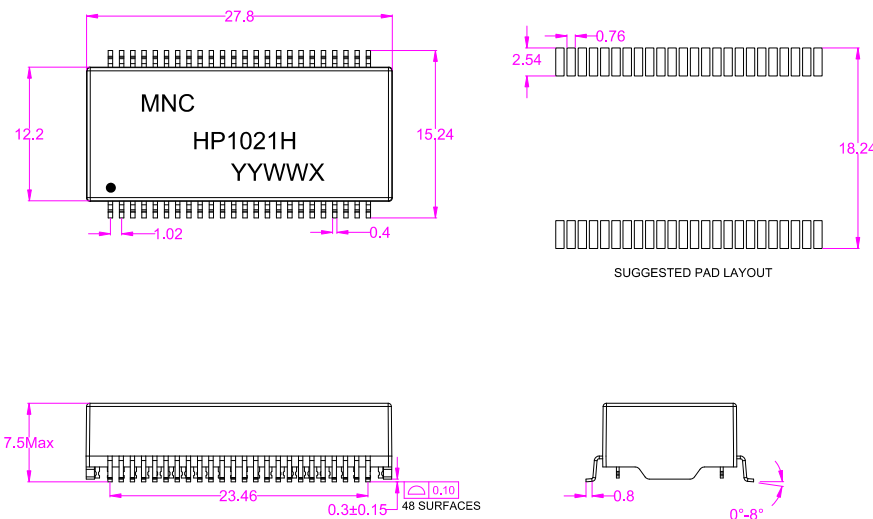
- Meets IEEE 802.3u & 802.3af Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

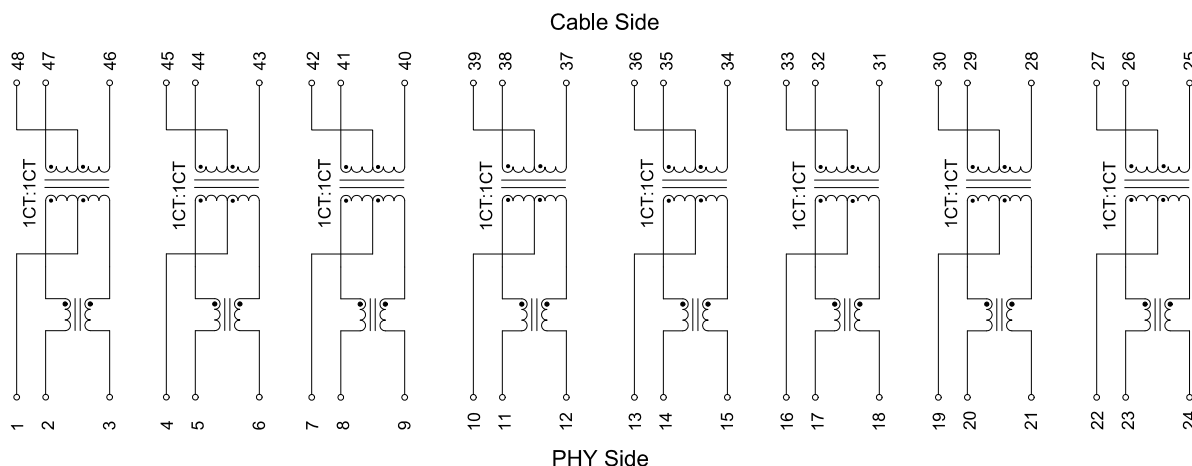
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
HP1021H	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

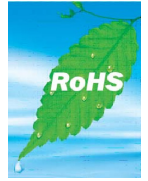


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



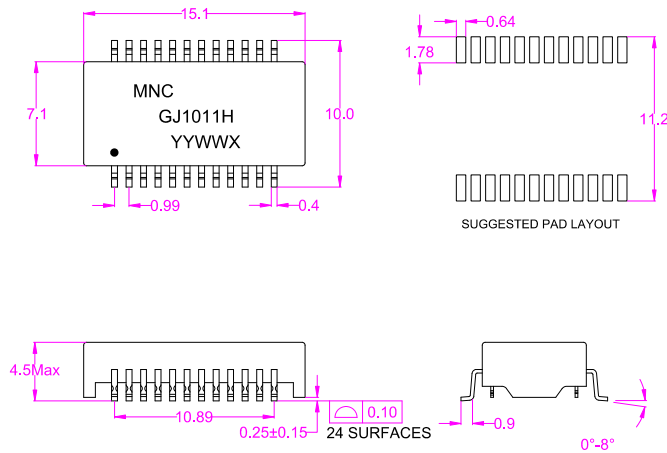
- Meets IEEE 802.3ab & 802.3af Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

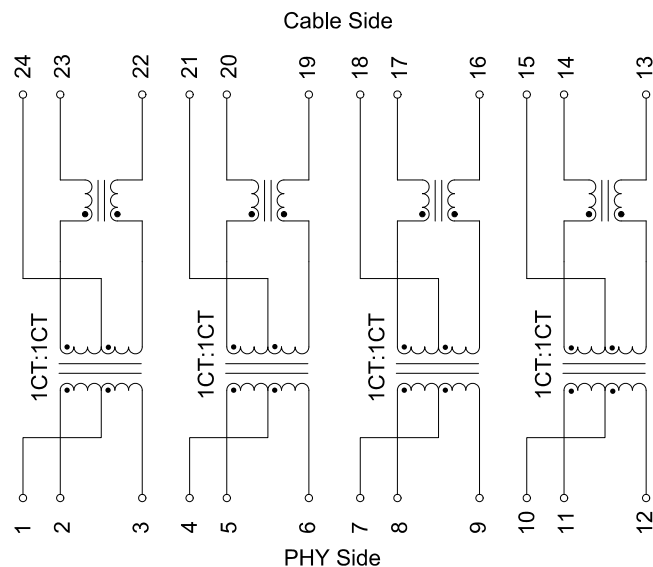
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GJ1011H	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



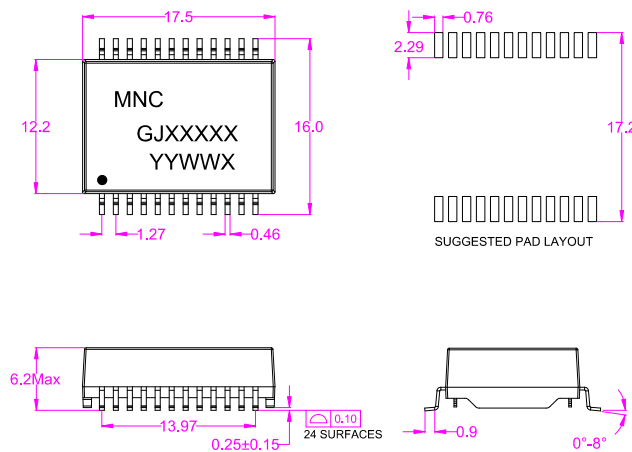
- Meets IEEE 802.3ab & 802.3af Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

Part Number	OCL(μH) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GJXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

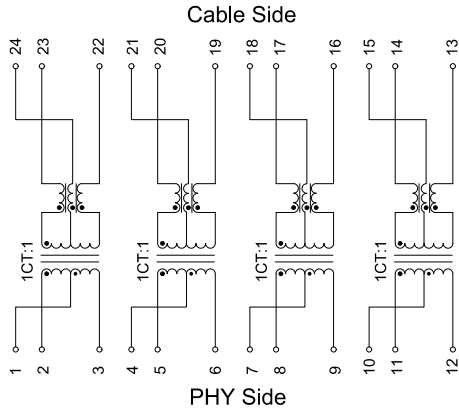
MECHANICAL



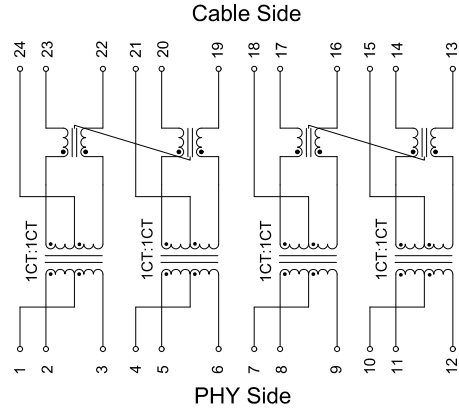
Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

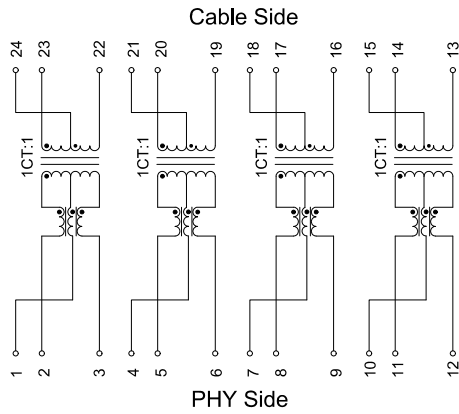
GJ1031H



GJ1081H



GJ1061H



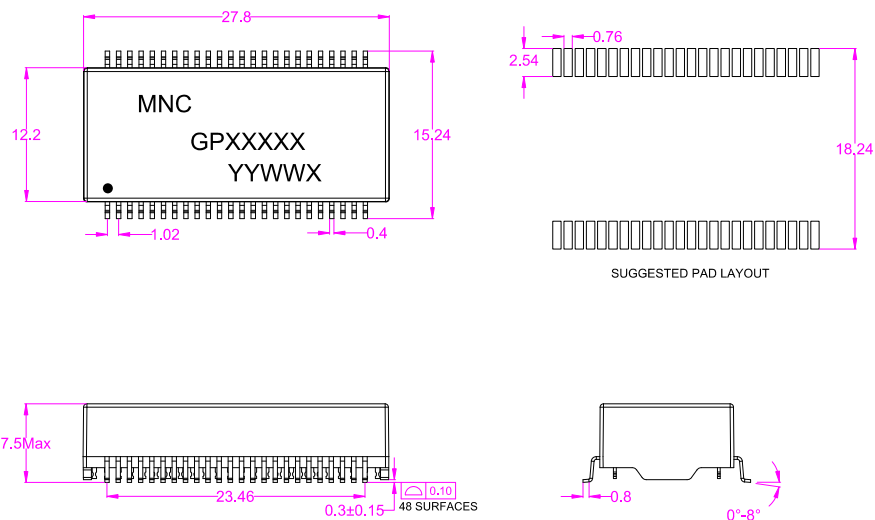
- Meets IEEE 802.3ab & 802.3af Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GPXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

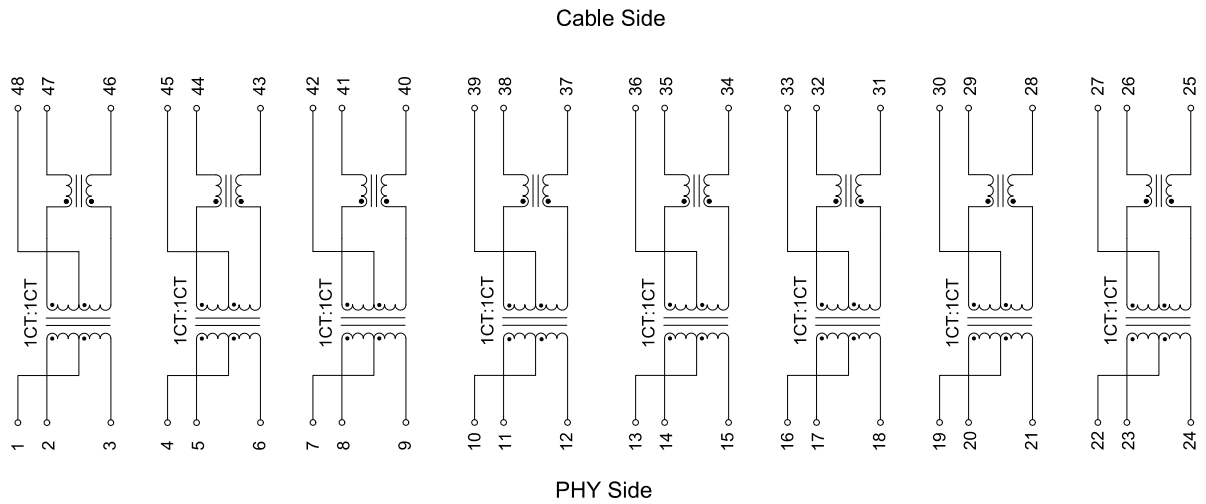
MECHANICAL



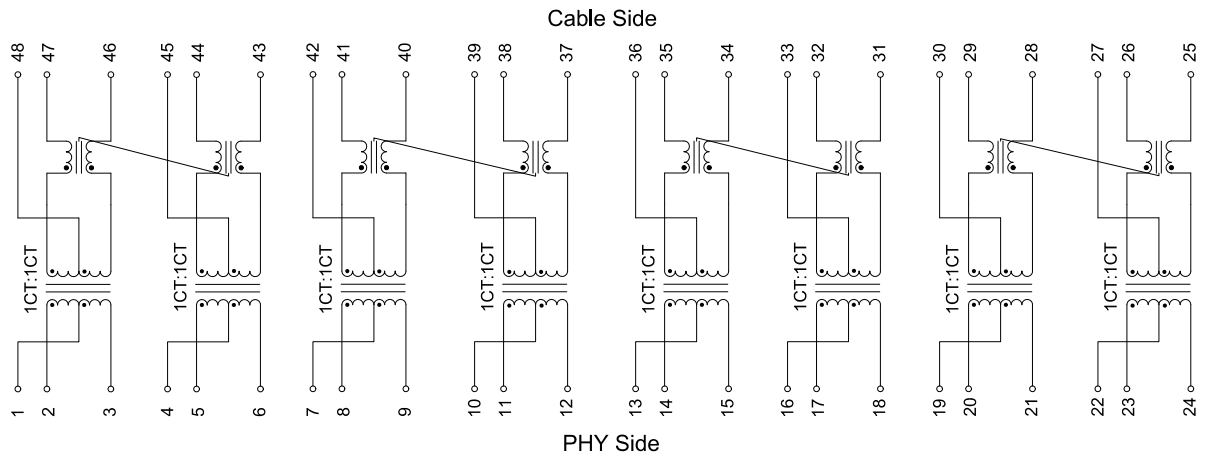
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

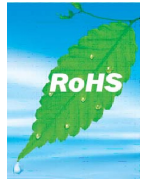
GP1011H



GP1081H



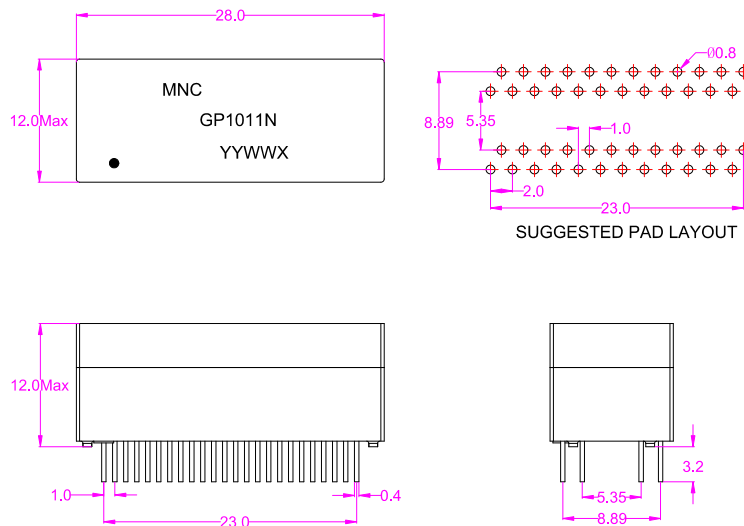
- Meets IEEE 802.3ab & 802.3af Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

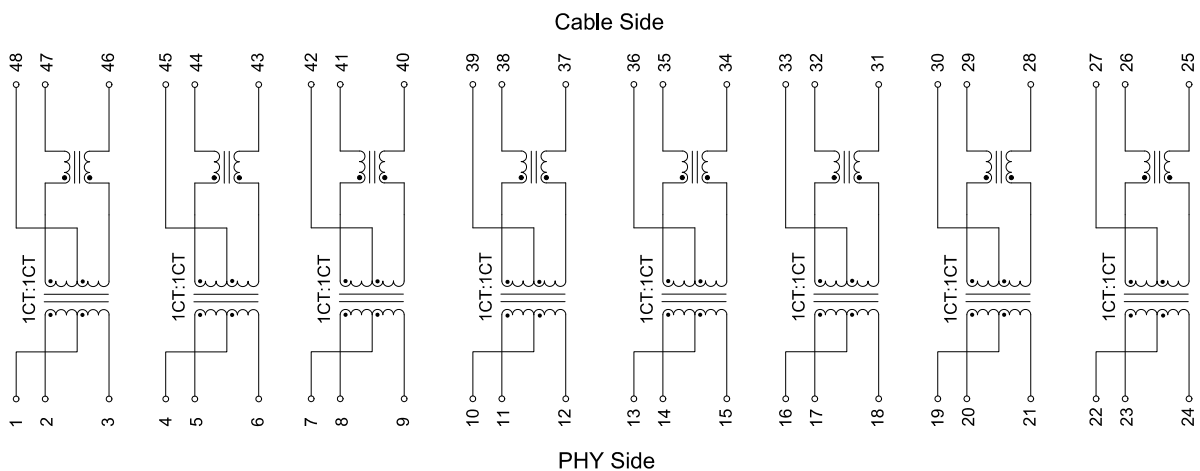
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GP1011N	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



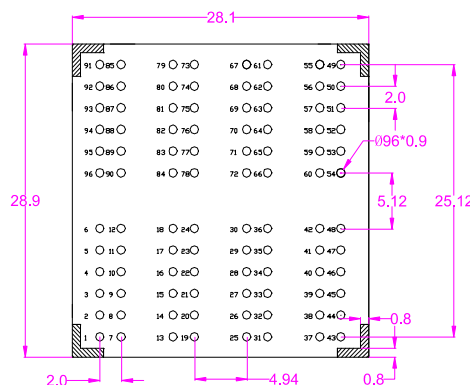
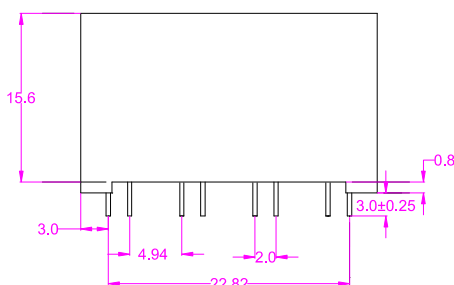
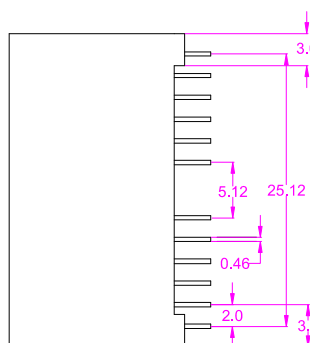
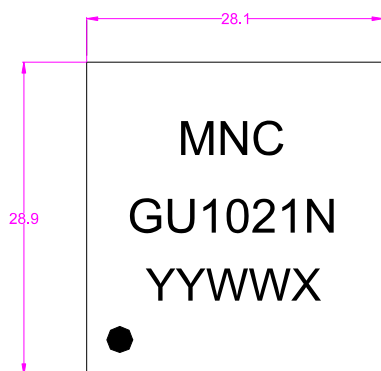
- Meets IEEE 802.3ab & 802.3af Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

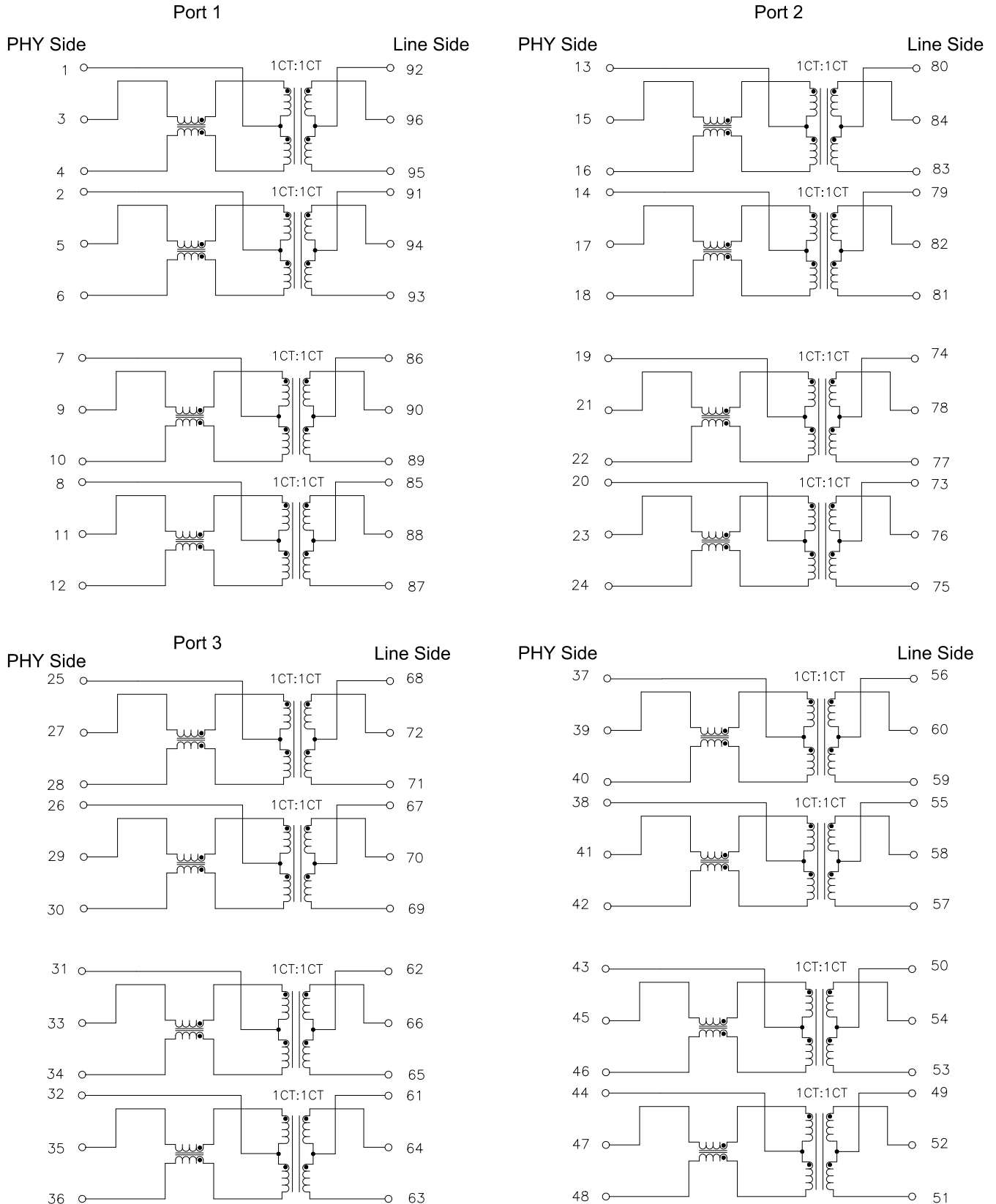
Part Number	OCL(μH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GU1021N	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



NO COMPONENT AREA.
Suggested Customer PCB Layout
(Component Side)

SCHEMATICS



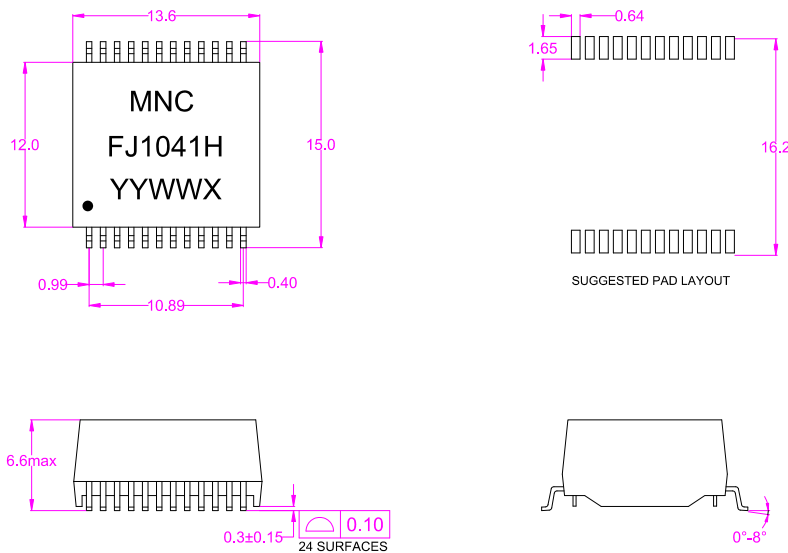
- Meets IEEE 802.3bz & 802.3af Standards.
- RoHS Compliant.
- 5G Base-T, Surface Mount Type, Open Header.
- Operating temperature range: -40°C to +85°C.
- 360mA Current Capability Per POE Port.



Electrical Specifications @25°C

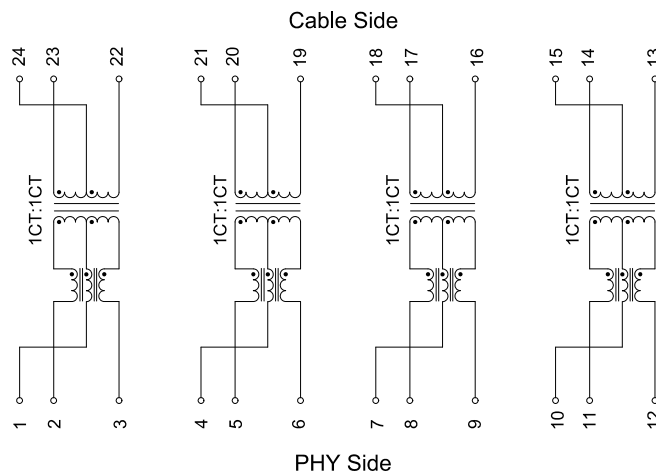
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FJ1041H	180	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



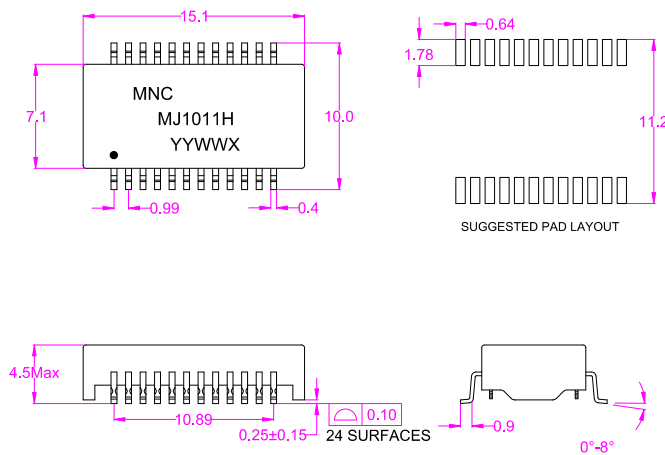
- Meets IEEE 802.3an & 802.3af Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 350mA Current Capability Per POE Port.



Electrical Specifications @25°C

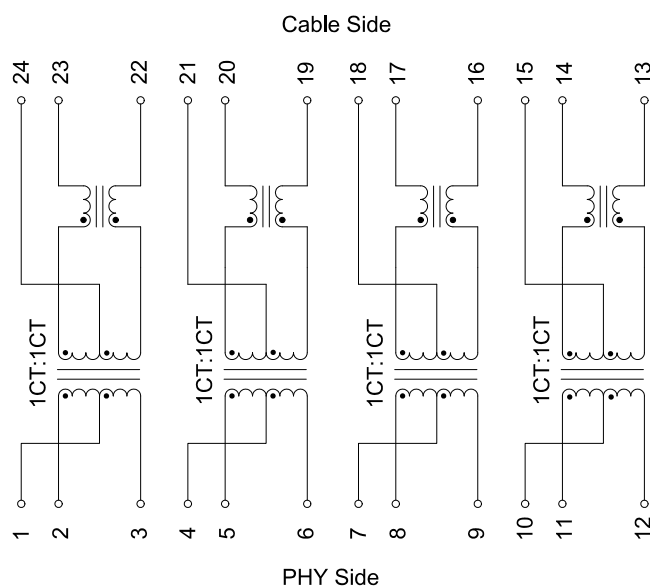
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MJ1011H	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



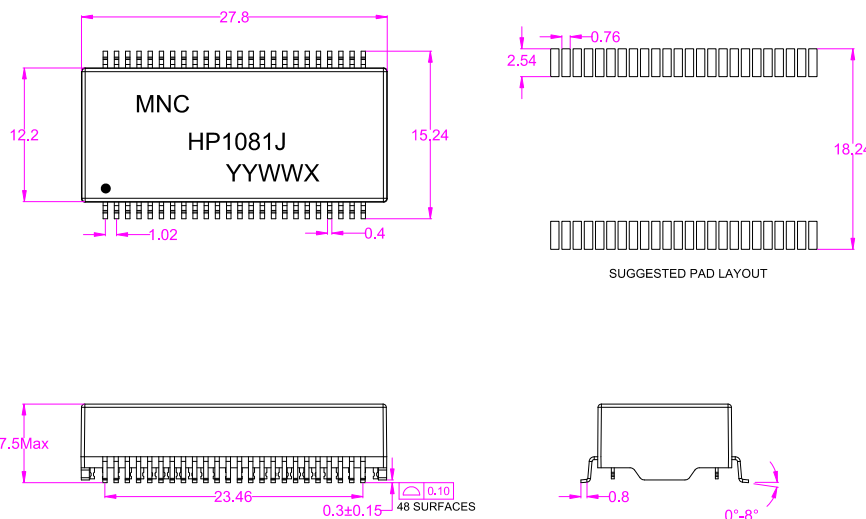
- Meets IEEE 802.3u & 802.3at Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

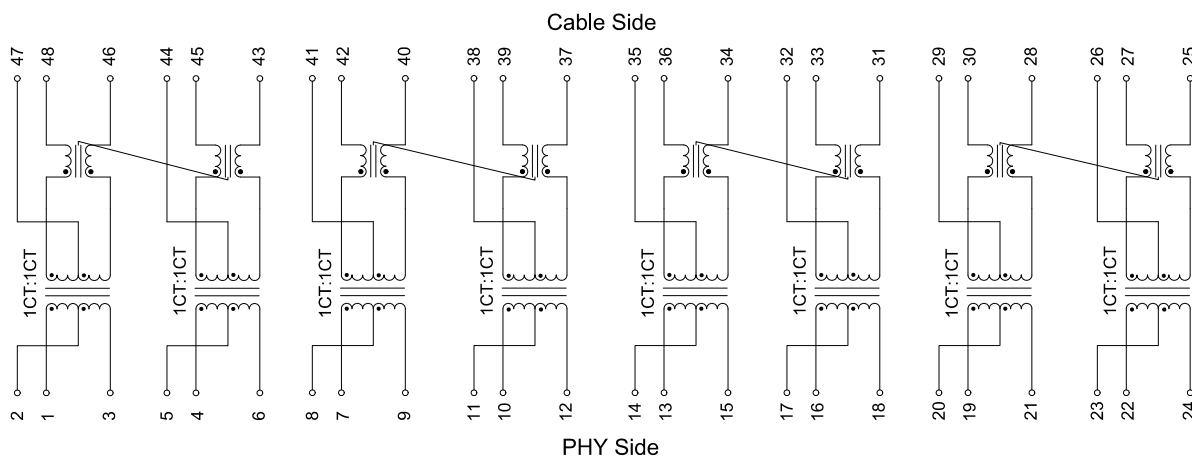
Part Number	OCL(μ H) 100KHz, 0.1Vrms, With 15mA DC Bias	Turns Ratio ($\pm 5\%$)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
HP1081J	350 μ H	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



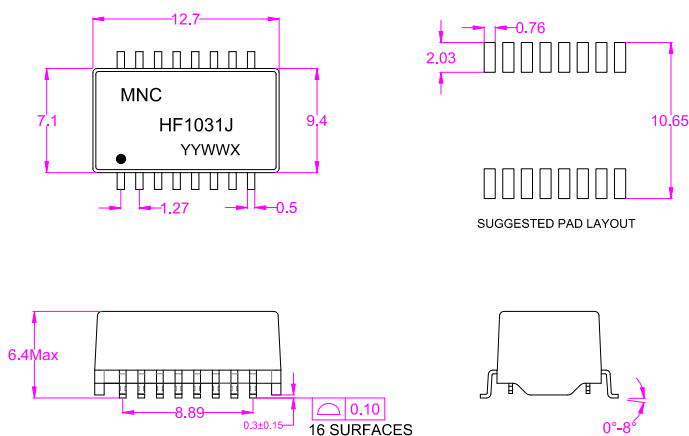
- Meets IEEE 802.3u & 802.3at Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 700mA Current Capability Per POE Port.



Electrical Specifications @25°C

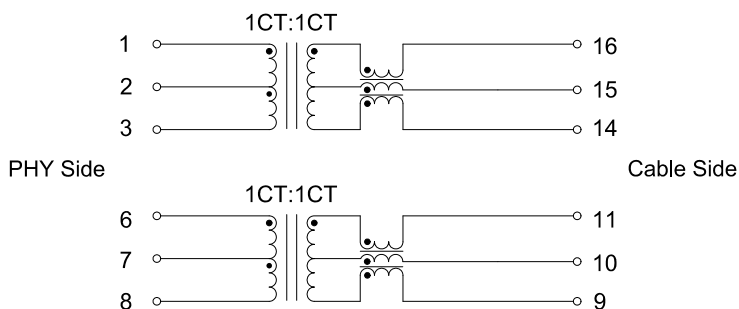
Part Number	OCL(μ H) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio ($\pm 5\%$)	Insertion Loss (dB Max)			Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz				
HF1031J	350uH	1CT:1CT	-1.1	-18	$-18+20*\log(f/30)$	-12	-35	$-33+20*\log(f/50)$	-30	1500		

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



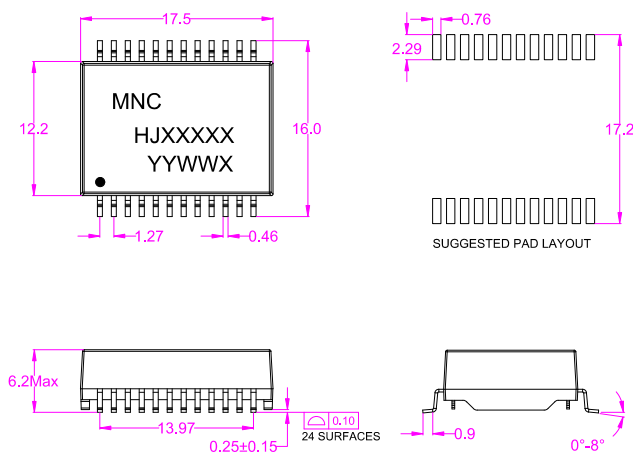
- Meets IEEE 802.3u & 802.3at Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

Part Number	OCL(μ H) 100KHz, 0.1Vrms, With 13mA DC Bias	Turns Ratio ($\pm 5\%$)	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	0.5-100MHz			
HJXXXXX	350uH	1CT:1CT	-1.1	-18	$-18+20*\log(f/30)$	-12	-35	$-33+20*\log(f/50)$	-30	1500		

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

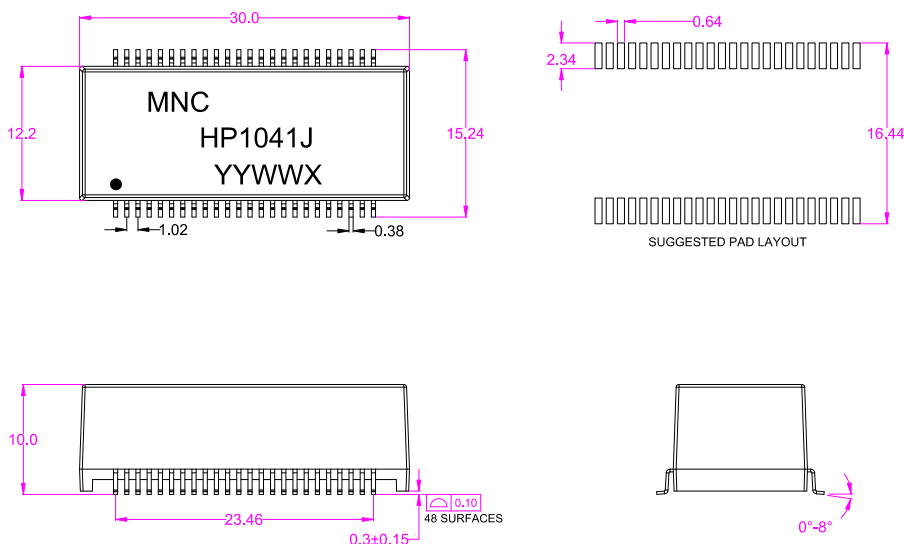
- Meets IEEE 802.3u & 802.3at Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

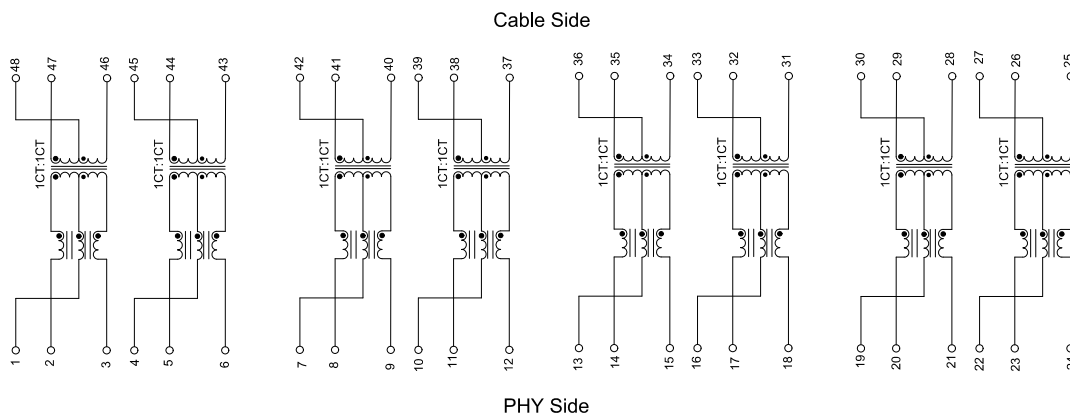
Part Number	OCL(μH) 100KHz,0.1Vrms, With 21mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
HP1041J	350μH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



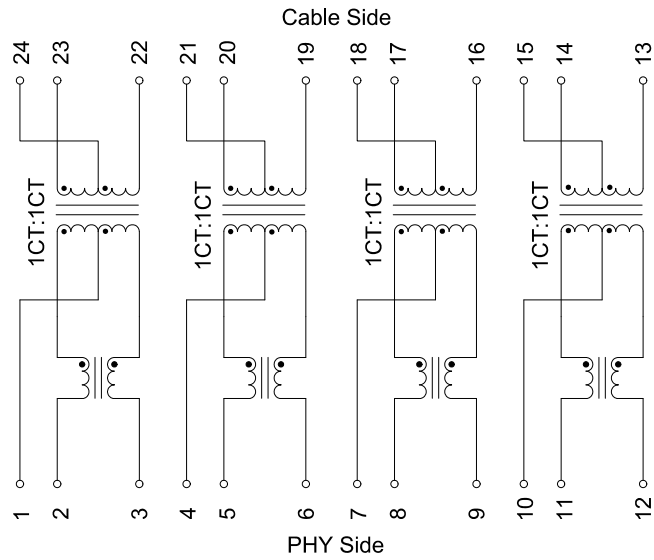
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

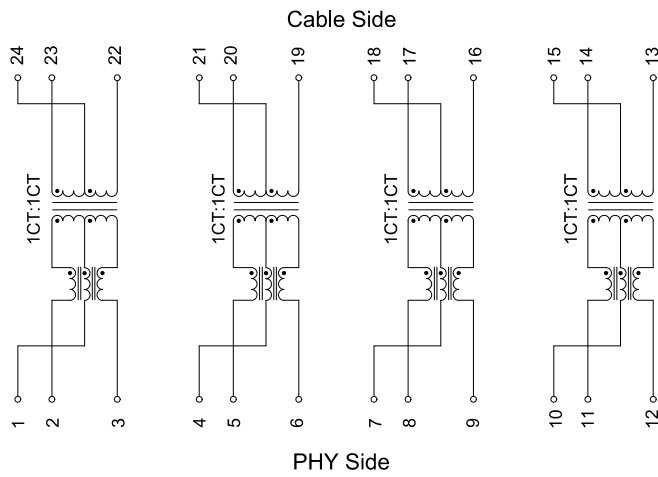


SCHEMATICS

HJ1021J



HJ1041J



- Meets IEEE 802.3ab & 802.3at Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.

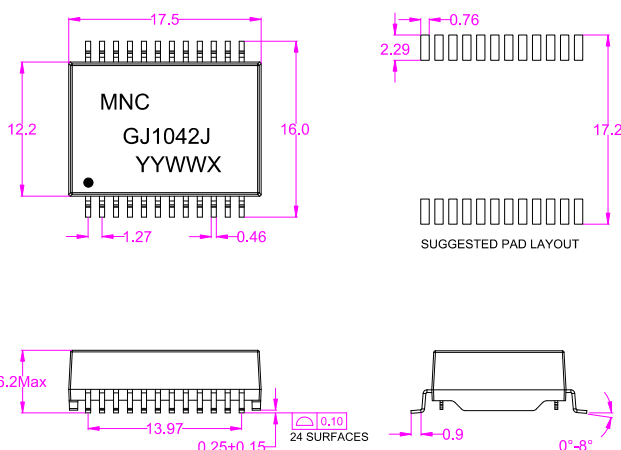


Electrical Specifications @25°C

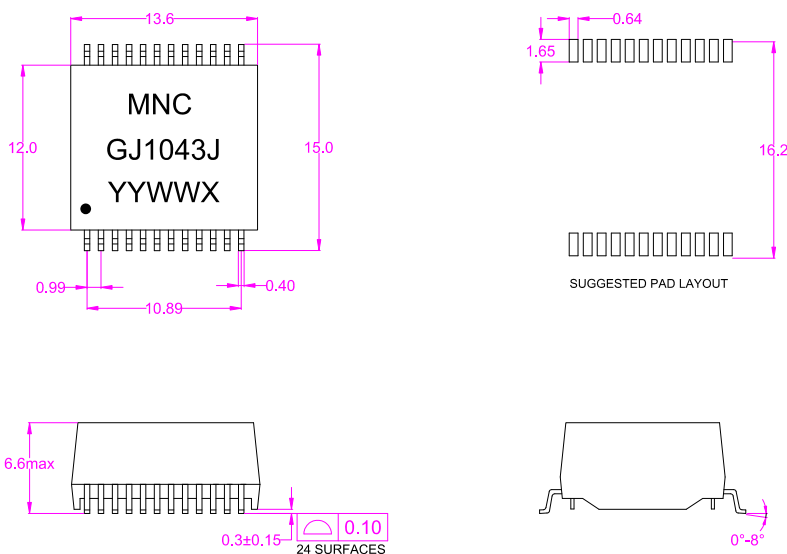
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 13mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GJXXXXX	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

GJ1042J

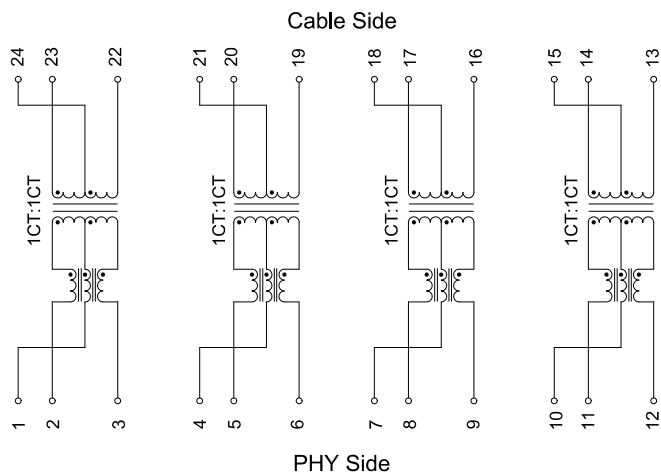


GJ1043J



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



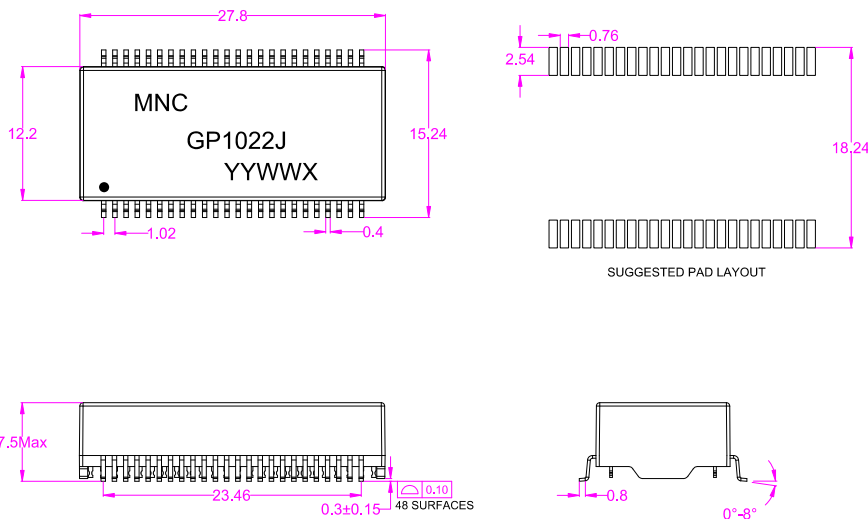
- Meets IEEE 802.3ab & 802.3at Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

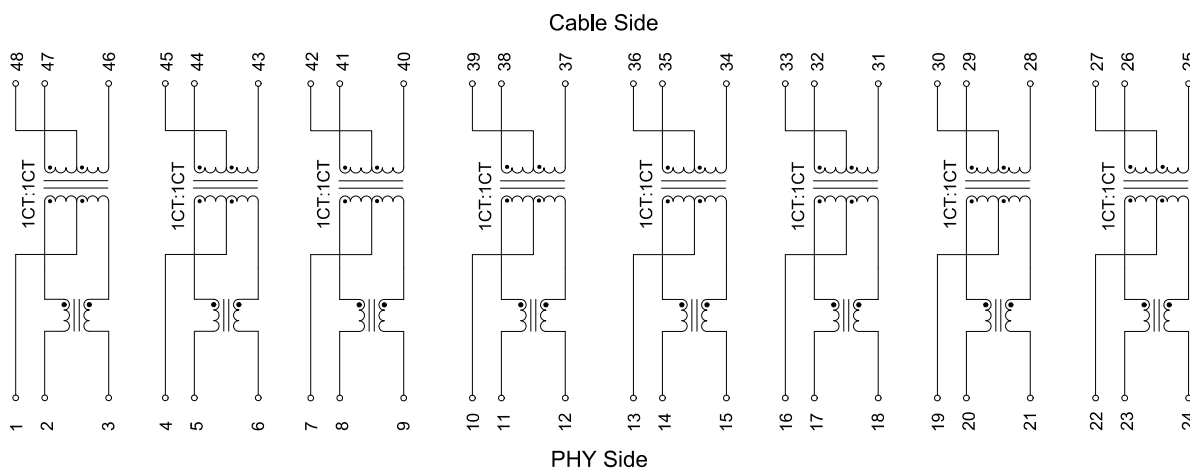
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 21mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GP1022J	350μH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



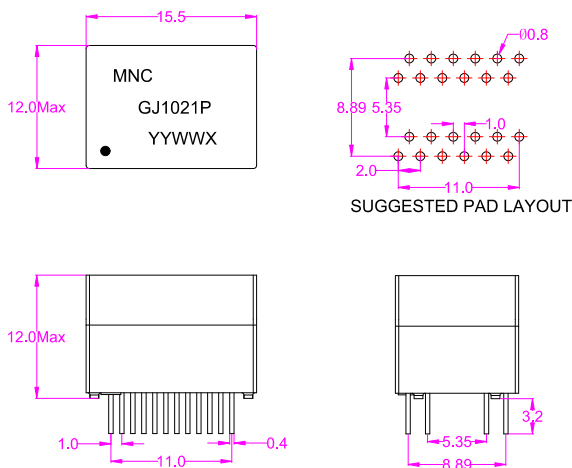
- Meets IEEE 802.3ab & 802.3at Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

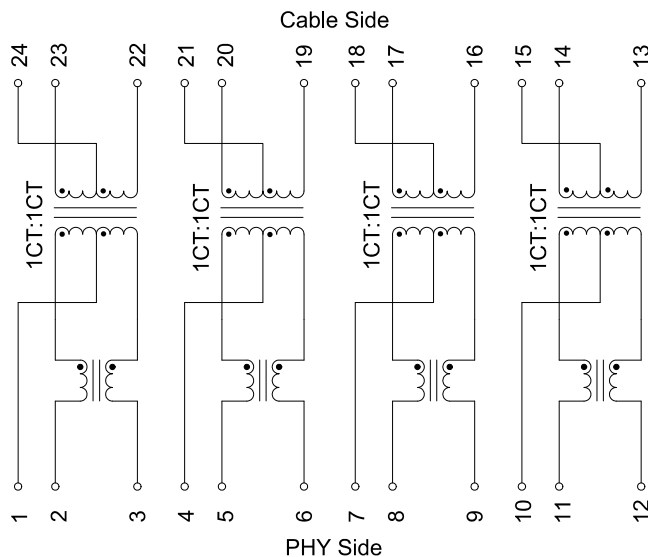
Part Number	OCL(μ H) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio ($\pm 5\%$)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GJ1021P	350 μ H	1CT:1CT	-1.1	-18	$-18+20*\log(f/30)$	-35	$-33+20*\log(f/50)$	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



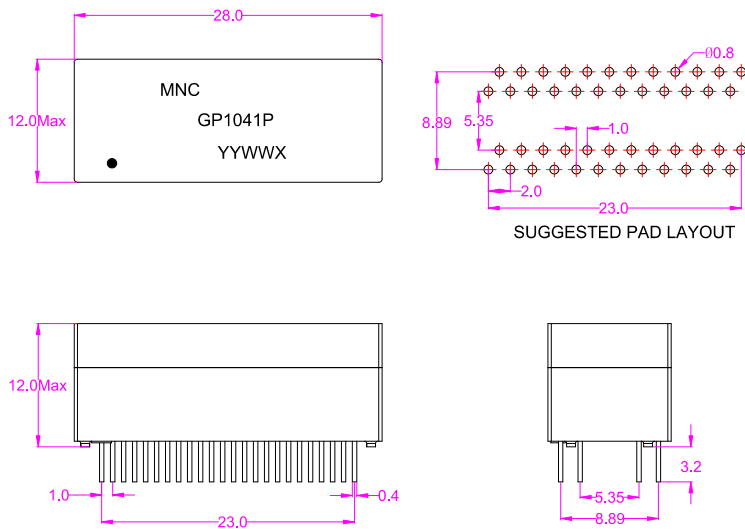
- Meets IEEE 802.3ab & 802.3at Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

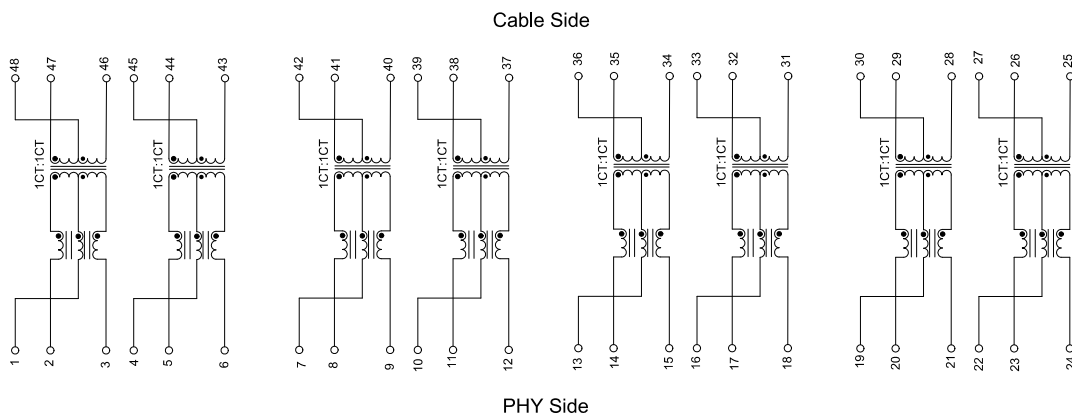
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GP1041P	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



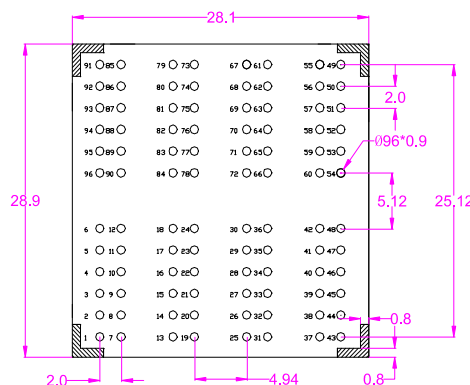
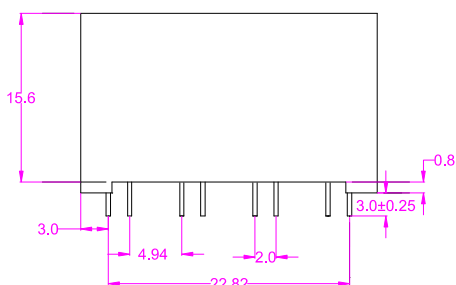
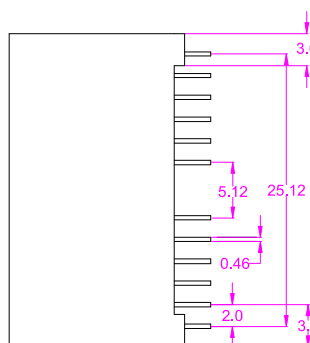
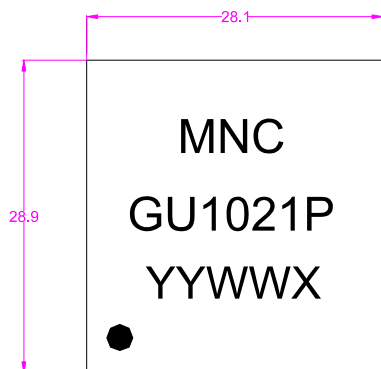
- Meets IEEE 802.3ab & 802.3at Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

Part Number	OCL(μH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GU1021P	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



NO COMPONENT AREA.
Suggested Customer PCB Layout
(Component Side)

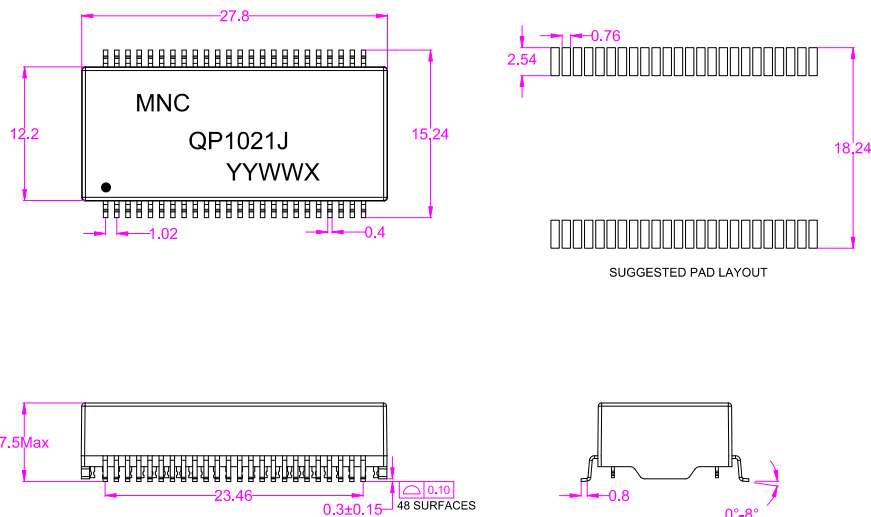
- Meets IEEE 802.3bz & 802.3at Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

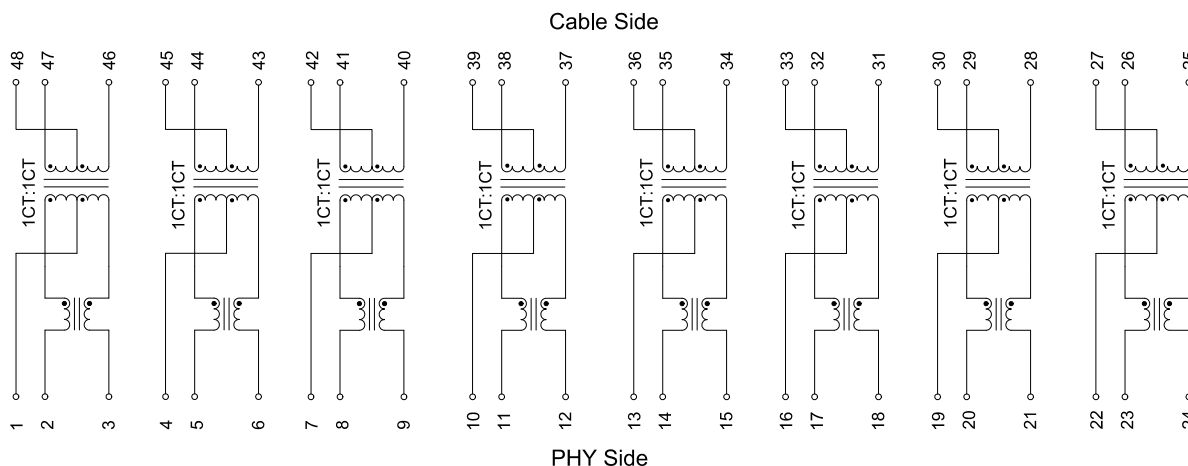
Part Number	OCL(uH Min) @100KHz,0.1V With 15mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QP1021J	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL

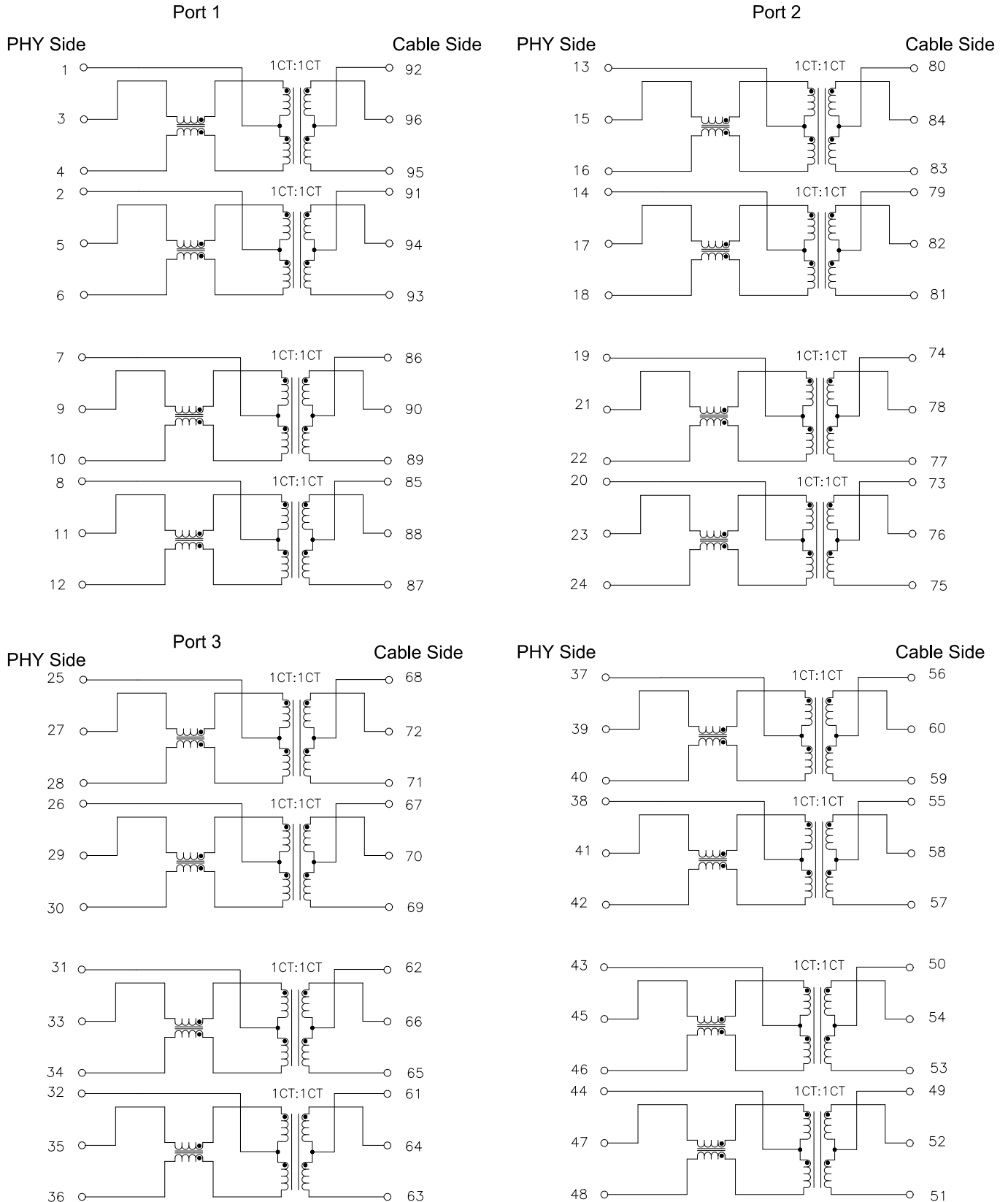


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



SCHEMATICS



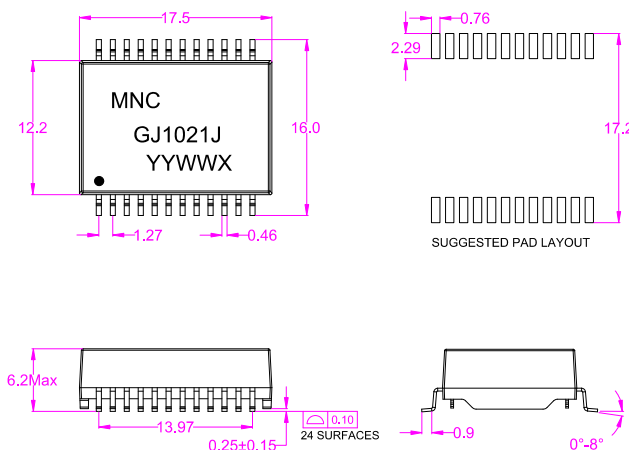
- Meets IEEE 802.3bz & 802.3at Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

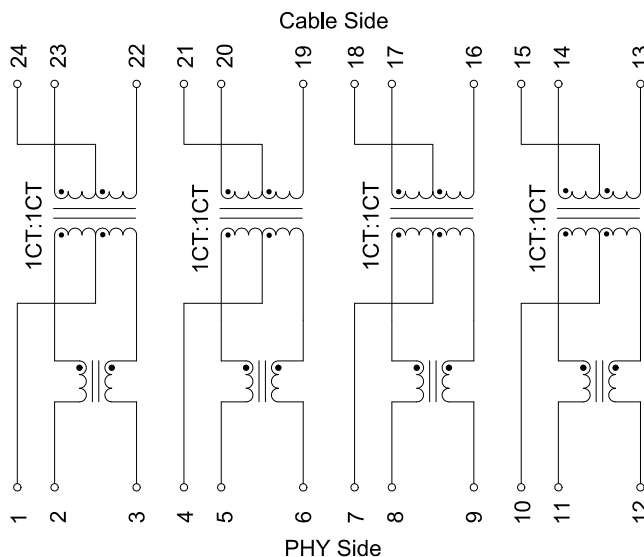
Part Number	OCL(uH Min) @100KHz,0.1V With 10.8mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QJ1021J	180	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



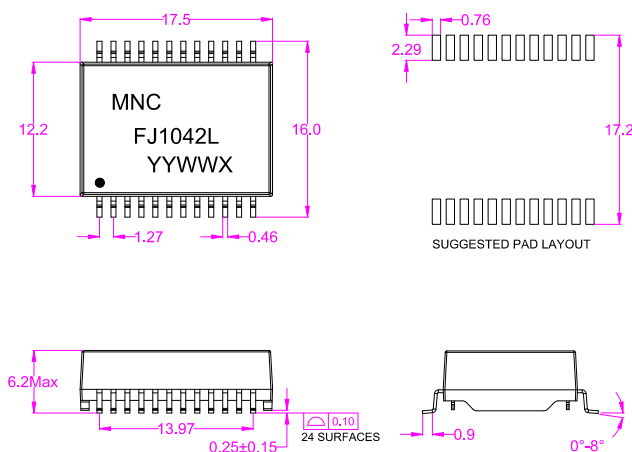
- Meets IEEE 802.3bz & 802.3at Standards.
- RoHS Compliant.
- 5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +85°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

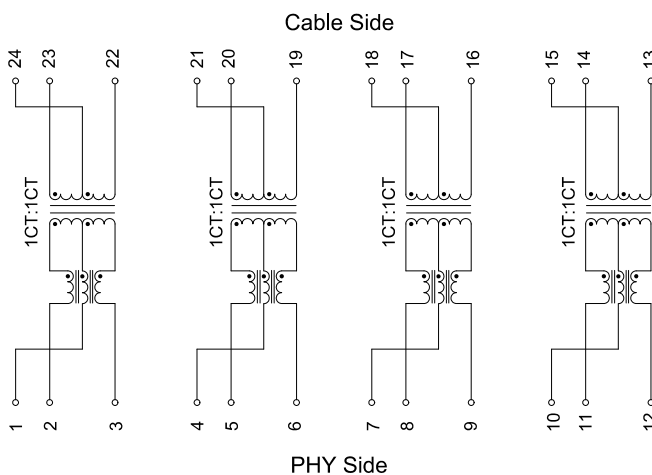
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FJ1042L	180	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



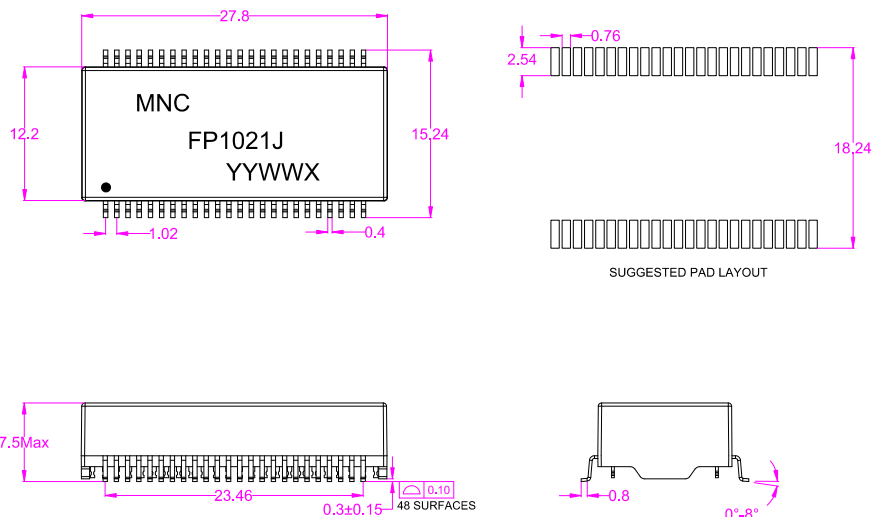
- Meets IEEE 802.3bz & 802.3at Standards.
- RoHS Compliant.
- 5G Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

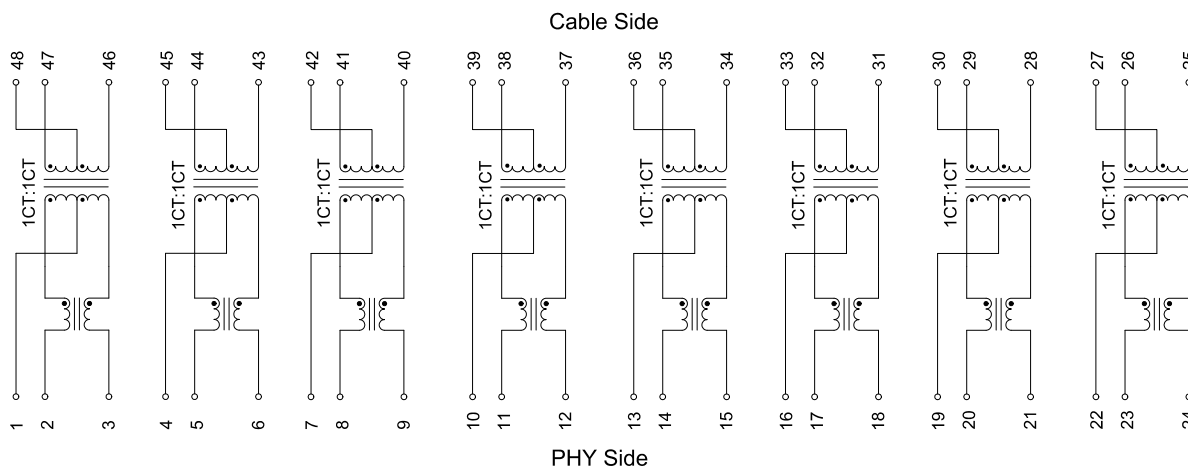
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FP1021J	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



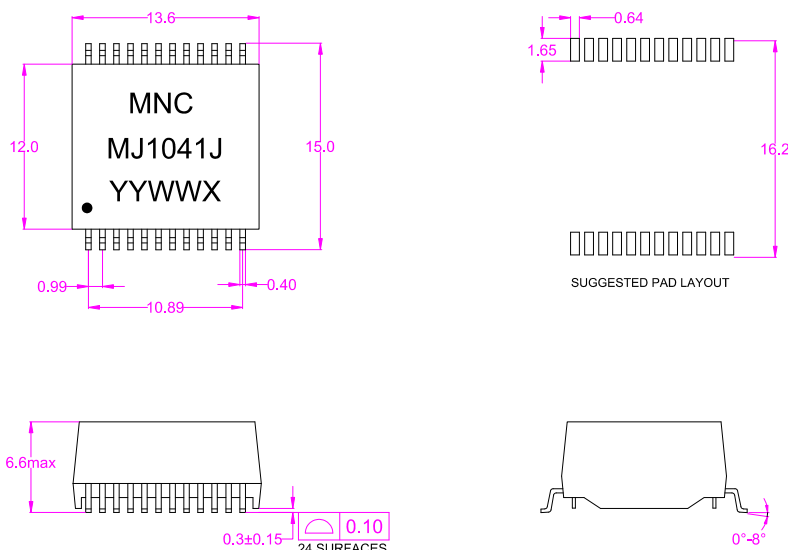
- Meets IEEE 802.3an & 802.3at Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 720mA Current Capability Per POE Port.



Electrical Specifications @25°C

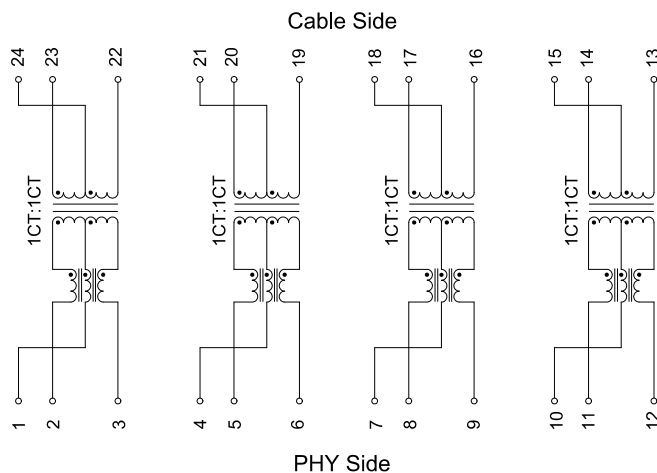
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
	With 8mA DC Bias 120uH (Typ)		100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MJ1041J	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL

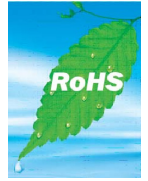


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



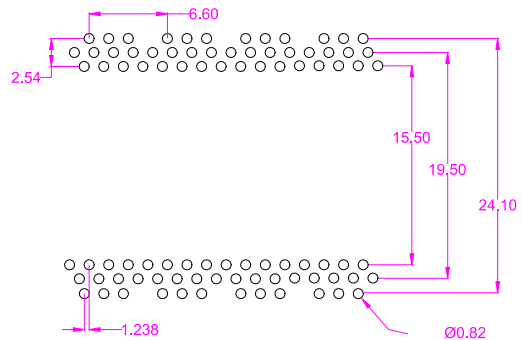
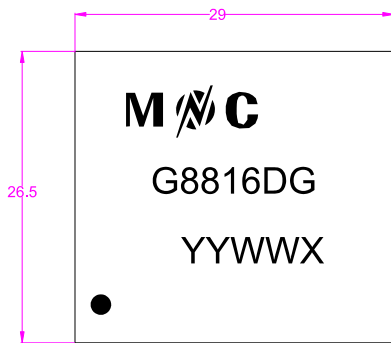
- Ⓢ Meets IEEE 802.3ab & 802.3at Standards.
- Ⓢ RoHS Compliant.
- Ⓢ 100/1000 Base-T, Through-Hole Type .
- Ⓢ Operating temperature range: 0°C to +70°C.
- Ⓢ 720mA Current Capability Per POE Port.



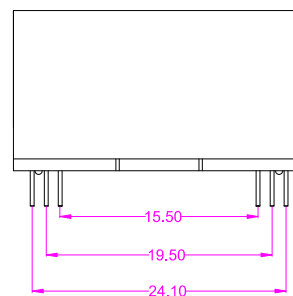
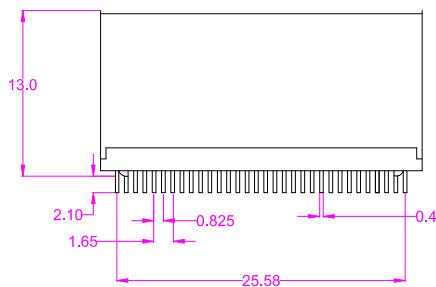
Electrical Specifications @25°C

Part Number	OCL (uH Min) @100KHz,0.1V With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)						Cross talk(dB Min)			HI-POT (Vrm)
				1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz	100MHz	
G8816DG	350	1CT:1CT	-1.0	-18	-16	-14.08	-12.5	-10	-40	-35	-30	1500	

MECHANICAL

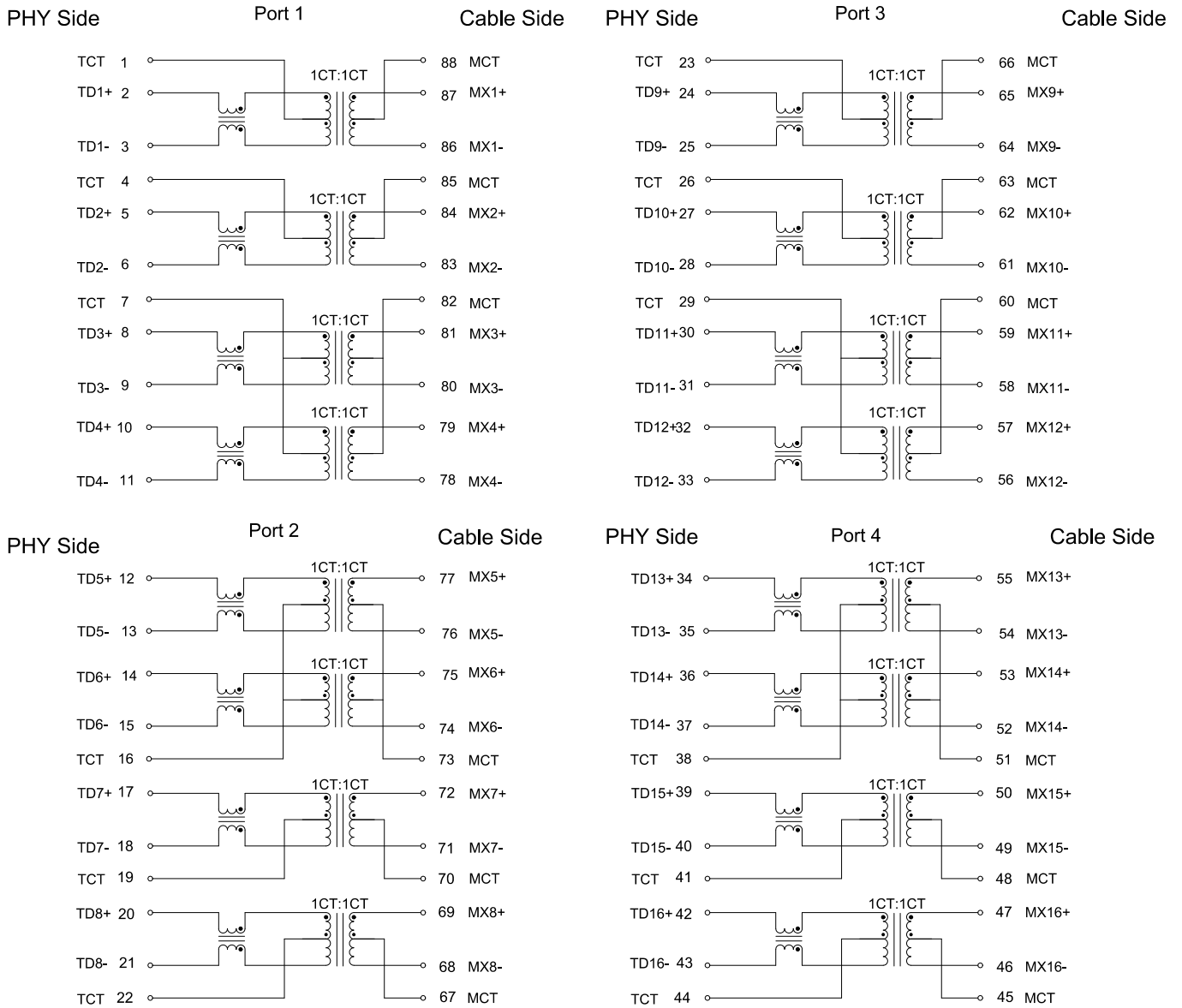


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



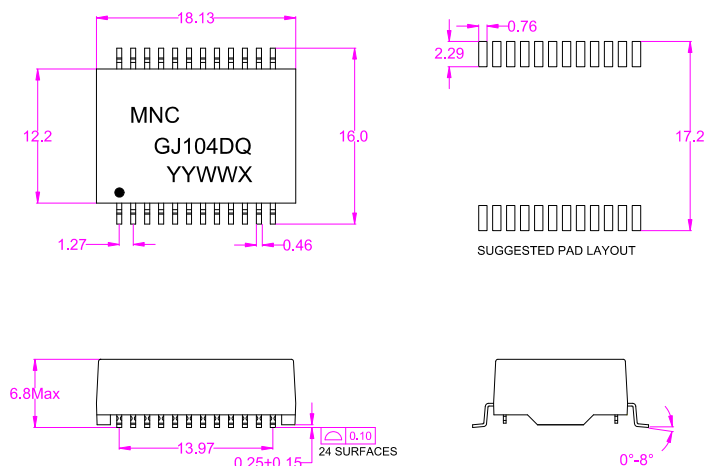
- Meets IEEE 802.3ab & 802.3bt Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C.
- 1.44A Current Capability Per Port.



Electrical Specifications @25°C

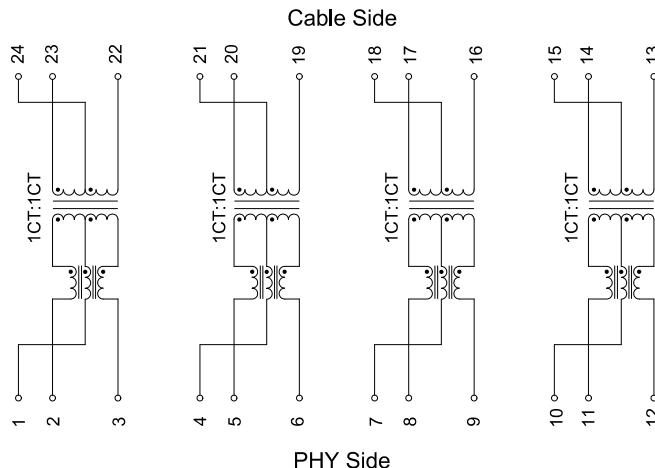
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 13mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GJ104DQ	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



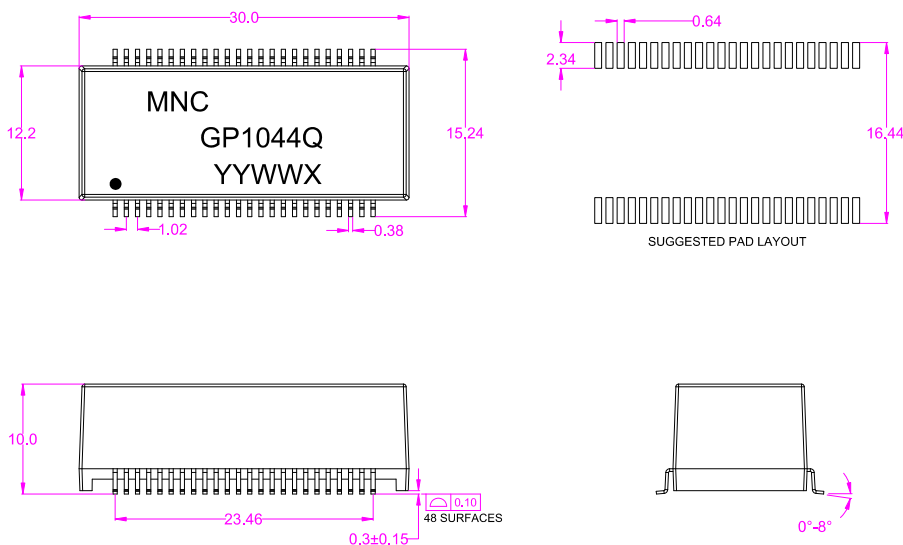
- Meets IEEE 802.3ab & 802.3bt Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header.
- Operating temperature range: -40°C to +85°C.
- 2.2A Current Capability Per Port.



Electrical Specifications @25°C

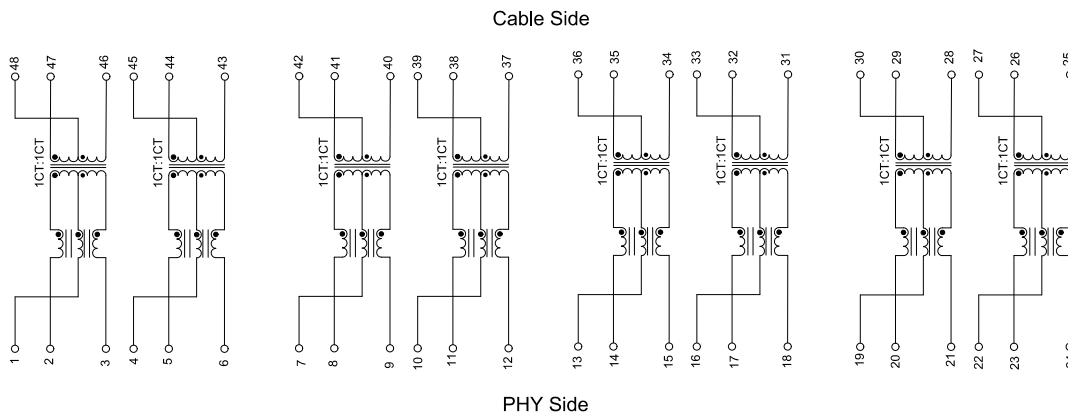
Part Number	OCL(μH) 100KHz, 0.1Vrms, With 21mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
			0.5-100MHz	10.1-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz		
GP1044Q	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

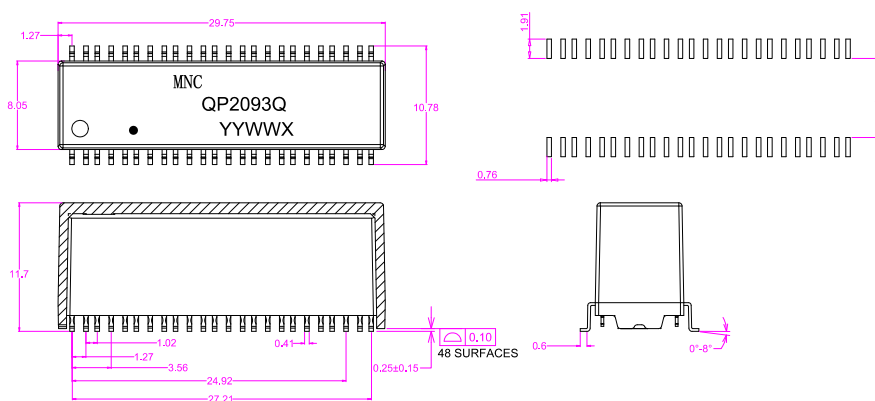


- Meets IEEE 802.3bz & 802.3bt Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header.
- Operating temperature range: -40°C to +85°C.
- 1.15A Current Capability Per Port / Two-pair.



Electrical Specifications @25°C																
Part Number	OCL(μH Min) @100kHz,0.1V		Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CCMR (dB Min)			DCMR (dB Min)		HI-POT (Vrms) 1mA 60S	
	With 0mA DC Bias	With 15mA DC Bias		1-100MHz	100MHz-200MHz	1-40MHz	40-200MHz	10-100MHz	100-200MHz	10-200MHz	200-500MHz	500-1GHz	10-100MHz	100-500MHz		500-1GHz
QP2093Q	180	150	1CT:1CT	-1.0	-1.5	-20	-20+15*log(f/40)	-32	-25	-14	-8	-7	-26	-16	-10	1500

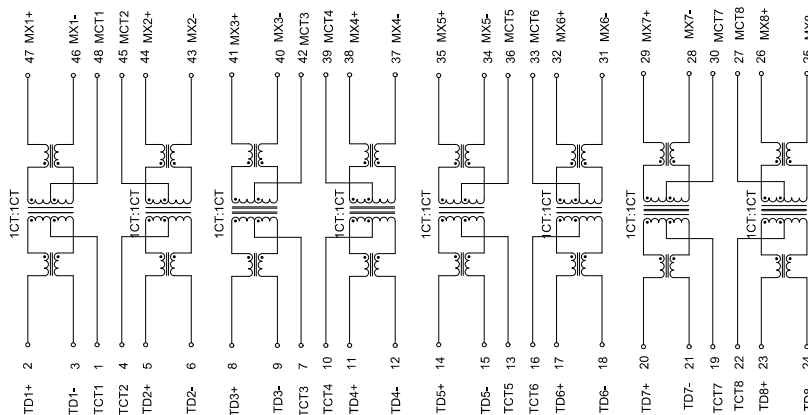
MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

Cable Side



PHY Side

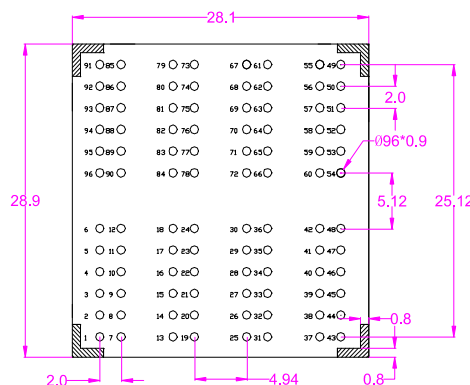
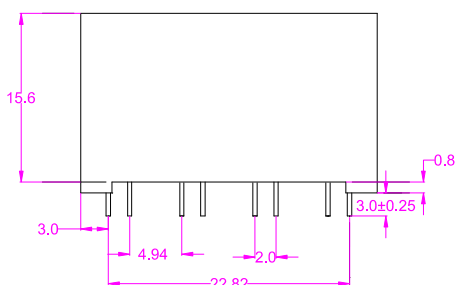
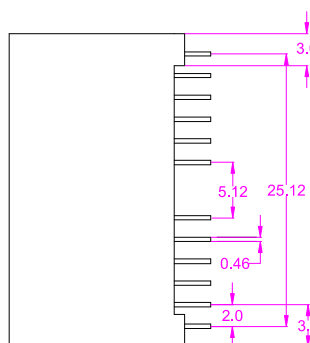
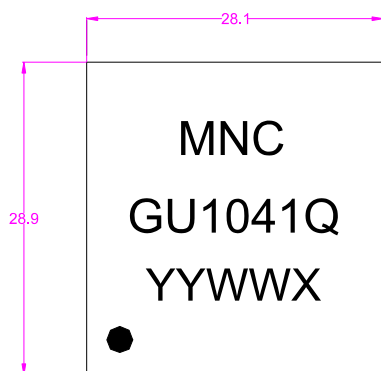
- Meets IEEE 802.3ab & 802.3bt Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 2A Current Capability Per Port.



Electrical Specifications @25°C

Part Number	OCL(μH) 100KHz,0.1Vrms, With 15mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	0.5-100MHz		0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
GU1041Q	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL



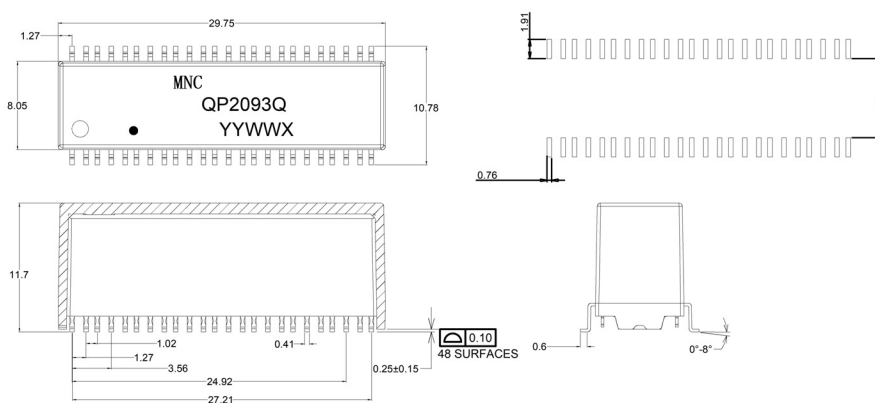
NO COMPONENT AREA.
Suggested Customer PCB Layout
(Component Side)

- Meets IEEE 802.3bz & 802.3bt Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +85°C.
- 1.15A Current Capability Per Port / Two-pair.



Electrical Specifications @25°C																
Part Number	OCL(μH Min) @100KHz,0.1V		Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CCMR (dB Min)			DCMR (dB Min)		HI-POT (Vrms) 1mA 60S	
	With 0mA DC Bias	With 15mA DC Bias		1-100MHz	100MHz-200MHz	1-40MHz	40-200MHz	10-100MHz	100-200MHz	10-200MHz	200-500MHz	500-1GHz	10-100MHz	100-500MHz		500-1GHz
QP2093Q	180	150	1CT:1CT	-1.0	-1.5	-20	-20+15*log(f/40)	-32	-25	-14	-8	-7	-26	-16	-10	1500

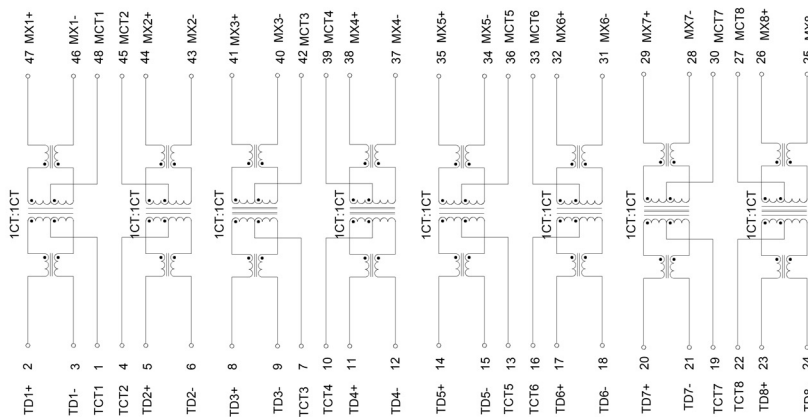
MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

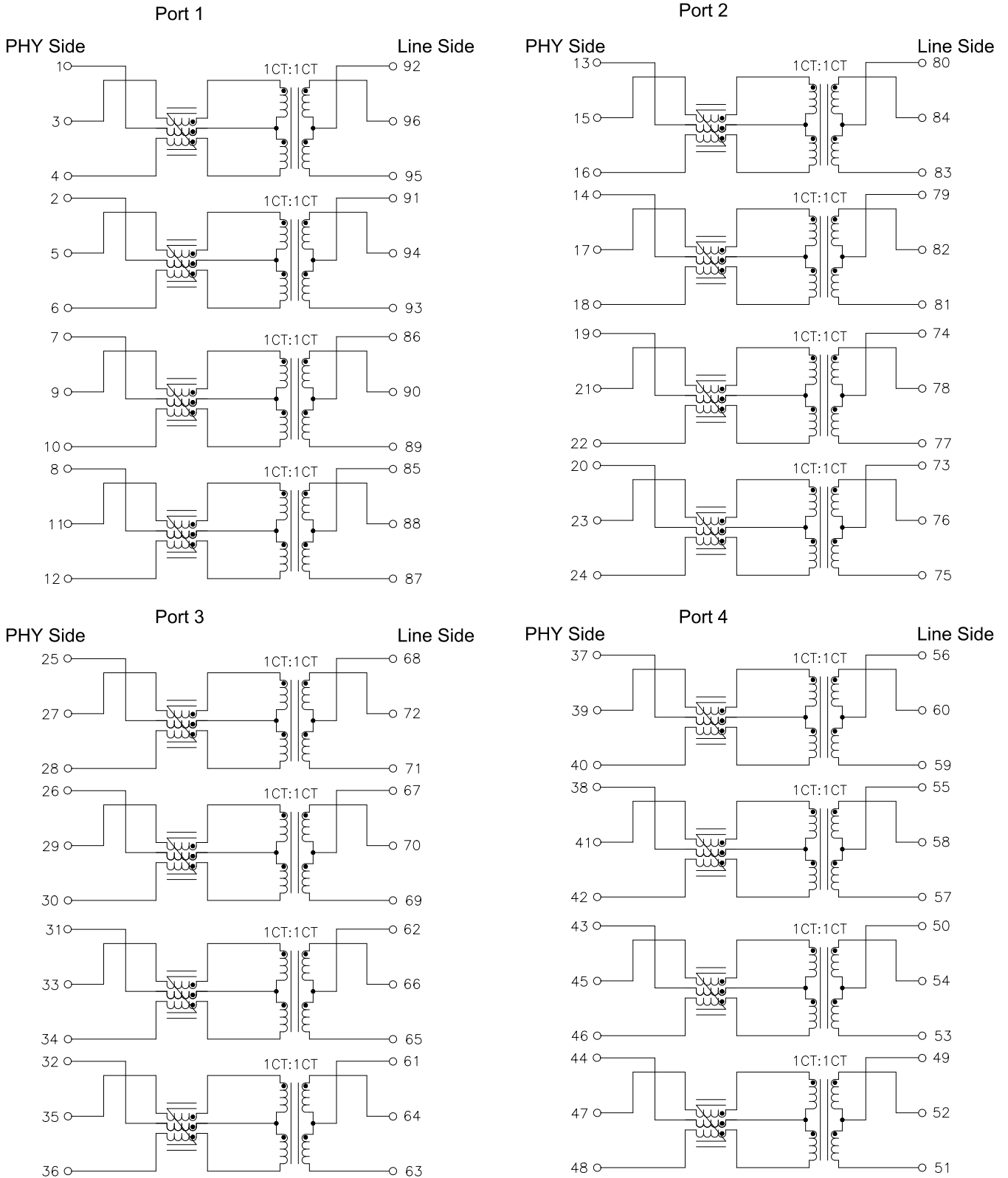
Cable Side



PHY Side

SCHEMATICS

G9603DG



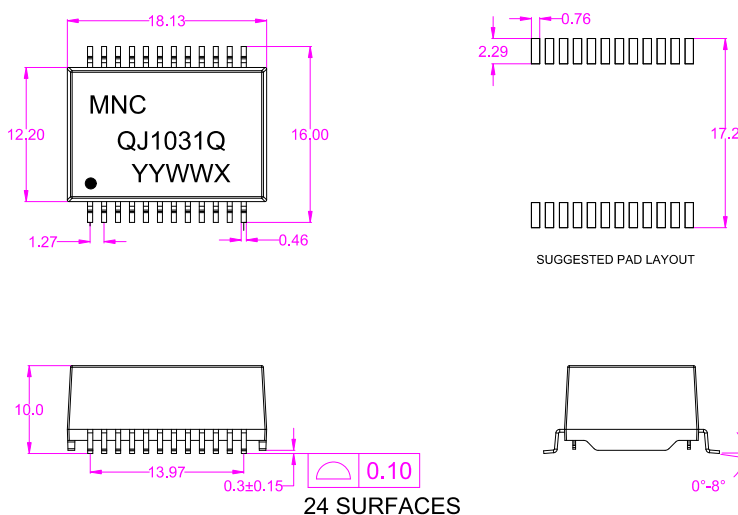
- Meets IEEE 802.3bz & 802.3bt Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 2A Current Capability Per Port.



Electrical Specifications @25°C

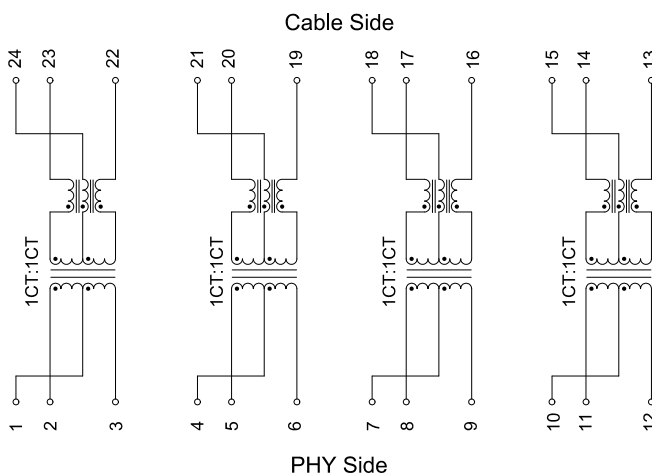
Part Number	OCL(μH Min) @100KHz,0.1V With 15mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QJ1031Q	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



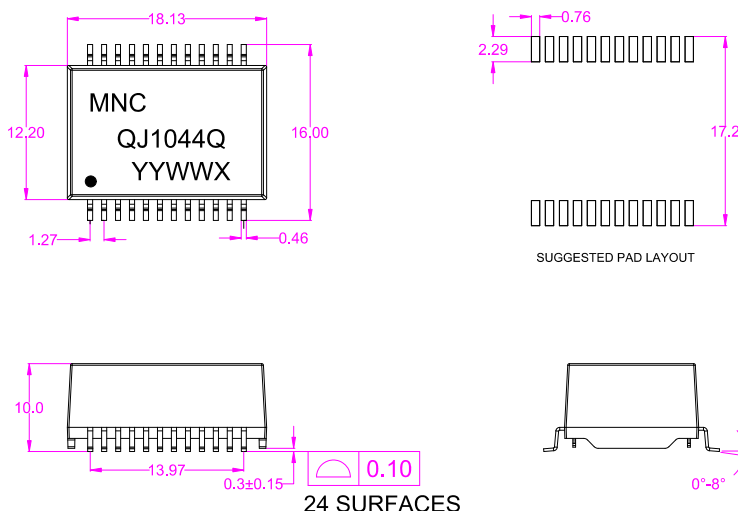
- Meets IEEE 802.3bz & 802.3bt Standards.
- RoHS Compliant.
- 2.5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 2A Current Capability Per Port.



Electrical Specifications @25°C

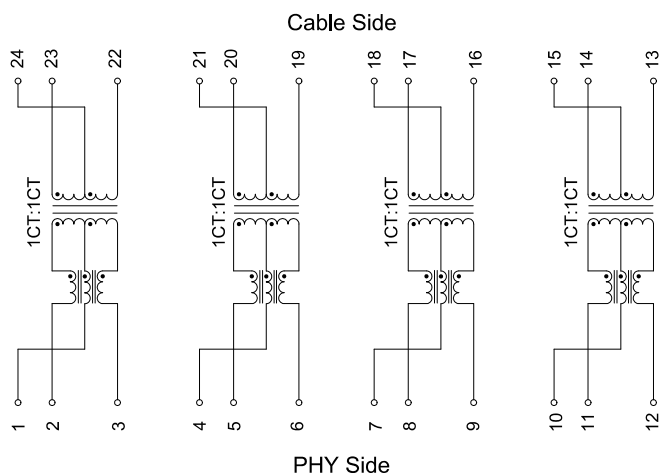
Part Number	OCL(μH Min) @100KHz,0.1V With 15mA DC Bias	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-200MHz	HI-POT (Vrms)
			1-100MHz	100-200MHz	1-40MHz	40-200MHz	1-30MHz	30-200MHz		
QJ1044Q	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



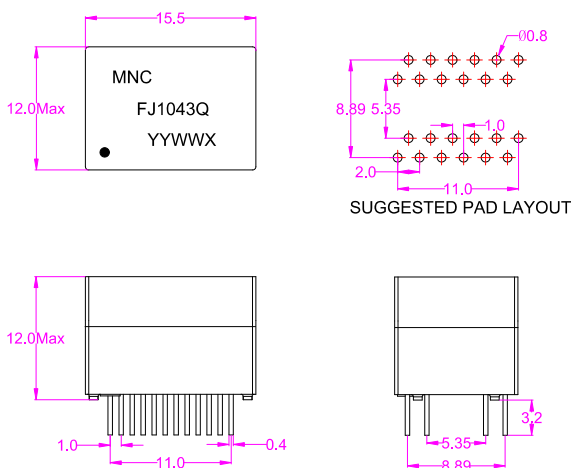
- Meets IEEE 802.3bz & 802.3bt Standards.
- RoHS Compliant.
- 5G Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.
- 1.44A Current Capability Per Port.



Electrical Specifications @25°C

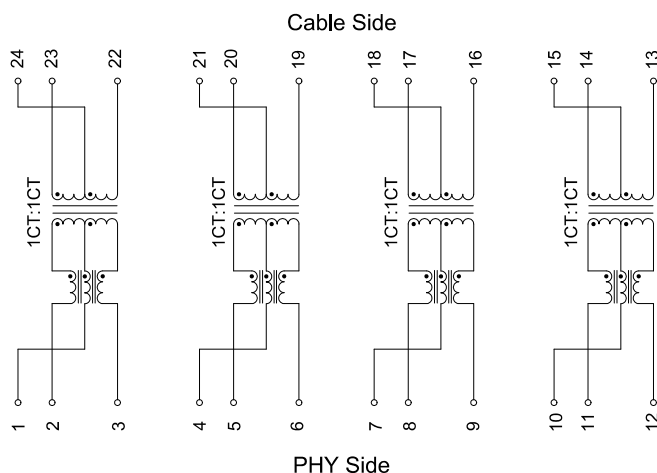
Part Number	OCL(μH Min) @100KHz,0.1V	Turns Ratio (±2%)	Insertion Loss (dB Max)		Return Loss (dB Min)		DCMR (dB Min)		Cross talk (dB Min) 1-250MHz	HI-POT (Vrms)
			1-100MHz	100-250MHz	1-40MHz	40-250MHz	1-30MHz	30-250MHz		
FJ1043Q	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-48	-44+19.2*log(f/50)	-43.1+20*log(f/100)	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



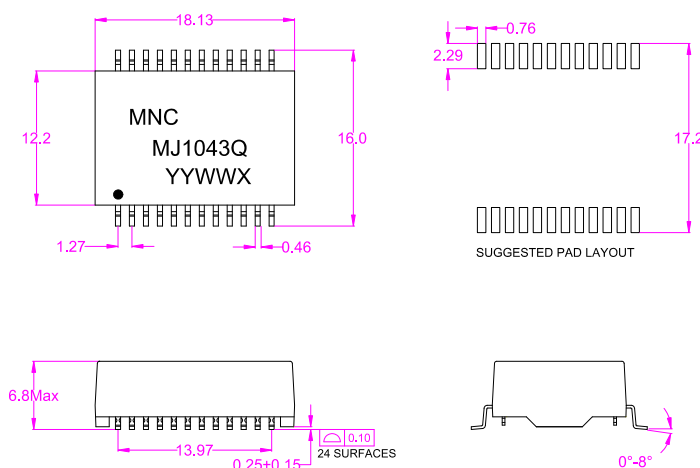
- Meets IEEE 802.3an & 802.3bt Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 1.2A Current Capability Per Port.



Electrical Specifications @25°C

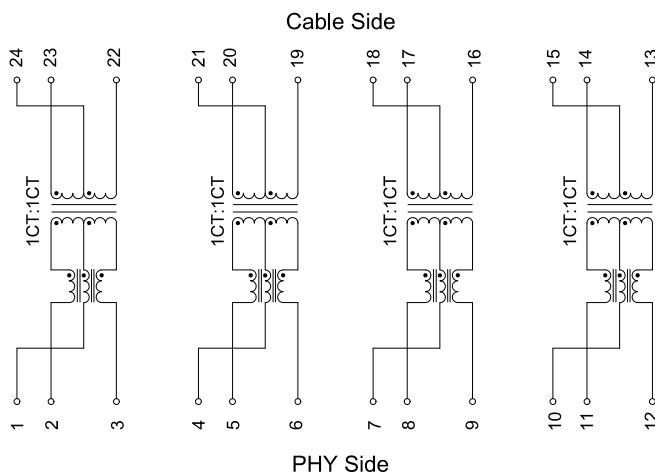
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
	With 15mA DC Bias		100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
MJ1043Q	120uH	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10*log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



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