

Stock code:002902

mentech

## Molding Power Inductor Catalog

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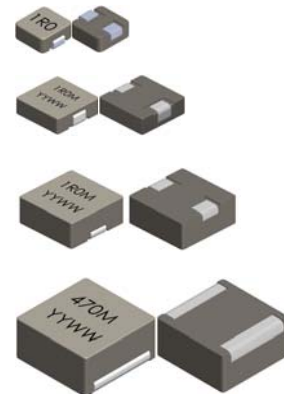
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Size range:  
4.7\*4.3\*1.2mm ~22.80\*22.3\*13.0mm

Inductance range:  
0.10μH ~ 150.0μH

Current range:  
1.8A ~ 80.0A



- ◆ Minisize MHCT series (Carbonyl) ..... 34

Size range:  
2.5\*2.0\*1.2mm

Inductance range:  
0.33μH ~ 4.7μH

Current range:  
1.0A ~ 4.7A

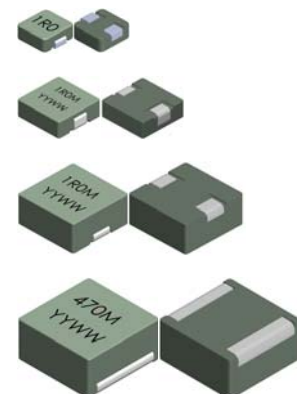


- ◆ MHC series (Carbonyl) ..... 35-48

Size range:  
4.7\*4.3\*1.2mm ~17.50\*17.15\*7.0mm

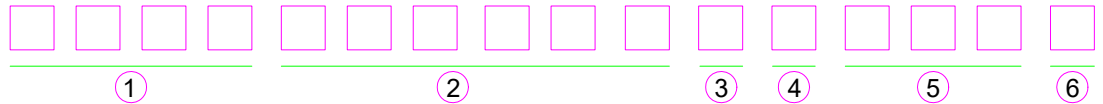
Inductance range:  
0.047μH ~ 33.0μH

Current range:  
2.5A ~ 80.0A



### Definition of Part Number

Part Name:



### Description

① Product symbol	MHA : Alloy powder molding inductor MHC : Carbonyl iron powder molding inductor
② Size	Min Size: 252012 Middle Size: 0412~1050 Big Size: 1235~1770
③ Product type	S SMT D DIP
④ Extracode	G RoHS or Halogen free
⑤ Inductance value	1R0 = 1.0uH 100 = 10uH 101 =100uH 102 =1000uH
⑥ Inductance tolerance	J = 5% K = 10% L = 15% M = 20% N = 30%

● Example: MHC0730SG1R0M

MHC is Product Symbol 0730 is 7.0x3.0mm(length x hight) SMT package of halogen-free product,Inductance value is 1.0 uH,Inductance tolerance is 20% .

		Mentech 铭普	Vishay 威世	Pulse 普思	Cyntec (Delta) 乾坤(新品名)	TDK
MHA series (Alloy) 合金系列	1	MHA0412SG	/	/	CMLB041B	SPM4012-LR
	2	MHA0415SG	/	/	/	SPM4015-LR
	3	MHA0420SG	IHLP-1616BZ-11	/	/	SPM4020-LR
	4	MHA0512SG	/	/	/	SPM5012-LR
	5	MHA0515SG	/	/	CMLB051B	SPM5015-LR
	6	MHA0518SG	/	/	CMLB051H	/
	7	MHA0520SG	IHLP-2020BZ-11	/	/	SPM5020-LR
	8	MHA0530SG	IHLP-2020CZ-11	/	CMLB053T	SPM5030
	9	MHA0712SG	/	/	/	/
	10	MHA0715SG	/	/	/	/
	11	MHA0718SG	/	/	/	/
	12	MHA0720SG	/	/	/	/
	13	MHA0724SG	/	/	/	/
	14	MHA0730SG	IHLP-2525CZ-11	/	CMLB063T	SPM6530
	15	MHA0750SG		/	CMLB065T	SPM6550
	16	MHA1040SG	IHLP-4040DZ-11	/	CMLB104T	SPM10040
	17	MHA1050SG	/	/	/	/
	18	MHA1235SG	/	/	/	/
	19	MHA1250SG	/	/	CMLB135T	/
	20	MHA1260SG	/	/	CMLB136T	SPM12565XT
	21	MHA1770SG	IHLP-6767GZ-11	/	CMLB177T	/
21	MHA2213SG	-IHLP-8787MZ-5A	/	/	/	
MHC series (Carbonyl) 羰基系列	22	MHCT252012NSC	IHHP-1008AB-01	/	HMLB25201B	/
	23	MHC0412SG	IHLP-1616AB-01	PA4546	CMLS041B	/
	24	MHC0420SG	IHLP-1616BZ-01	PA5402	/	/
	25	MHC0512SG	IHLP-2020AB-01	PA5403	CMLS051B	/
	26	MHC0520SG	IHLP-2020BZ-01	PA4345	/	/
	27	MHC0530SG	IHLP-2020CZ-01	PA4340	/	/
	28	MHC0718SG	IHLP-2525AH-01	PA5447	/	/
	29	MHC0724SG	IHLP-2525BD-01	PA4548	/	/
	30	MHC0730SG	IHLP-2525CZ-01	PA4341	CMLS063T	/
	31	MHC0750SG	IHLP-2525EZ-01	PA5404	CMLS065T	/
	32	MHC1040SG	IHLP-4040DZ-01	PA4342	CMLS104T	/
	33	MHC1235SG	IHLP-5050CE-01	PA5405	/	/
	34	MHC1250SG	IHLP-5050EZ-01	PA4346	CMLS135T	/
	35	MHC1264SG	IHLP-5050FD-01	PA4343	CMLS136E	/
	36	MHC1770SG	IHLP-6767GZ-01	PA4344	/	/



	MHA 0412NSG	MHA 0415NSG	MHA 0420NSG	MHA 0512NSG	MHA 0515NSG	MHA 0518NSG	MHA 0520NSG
Base (mm max)	4.7x4.3	4.7x4.3	4.7x4.3	5.75x5.4	5.75x5.4	5.75x5.4	5.75x5.4
Height (mm max)	1.2	1.5	2.0	1.2	1.5	1.8	2.0
Inductance	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR
	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ
0.1uH			30.0 12.0 4.0				
0.22uH		14.0 7.0 9.0	12.5 9.0 6.6				18.7 15.0 4.5
0.33uH	8.4 6.5 19.0				15.0 10.0 9.0		
0.47uH	6.8 6.0 21.0		10.5 7.0 14.0			15.5 10.5 9.0	
0.56uH			10.0 6.5 16.0			15.0 9.5 10.0	15.0 9.5 10.0
0.68uH	6.0 4.5 36.0		9.0 6.0 18.0			11.2 8.9 18.0	11.2 8.9 18.0
0.82uH							9.0 8.0 17.0
1.0uH	5.2 4.2 47.0		7.0 4.5 27.0	7.6 5.1 36.8	9.0 6.5 23.0	9.0 8.0 17.0	
1.2uH			7.0 4.5 27.0		8.0 5.3 33.7	8.0 7.5 20.0	
1.5uH	4.0 3.25 75.0	6.0 4.0 63.0	6.0 4.0 46.0				8.0 5.5 30.0
2.2uH	3.5 2.75 83.5		5.0 3.0 58.0	4.0 3.5 76.0	6.0 3.3 64.0	6.5 5.0 35.0	7.0 5.0 34.0
3.3uH			4.0 2.5 87.0	3.7 3.0 98.0	5.0 3.2 72.0	5.0 4.5 58.0	5.0 4.5 58.0
4.7uH	2.8 1.8 195.0		3.0 2.2 105.0	3.4 2.3 163.0	4.0 3.0 106.0	4.0 3.5 85.0	4.0 3.5 78.0
5.6uH							
6.8uH			2.5 2.0 178.0	2.3 2.0 250.0	3.2 2.5 130.0	3.4 2.8 120.0	3.4 2.8 120.0
8.2uH			2.0 1.8 207.0			3.1 2.6 150.0	3.1 2.6 150.0
10.0uH			1.8 1.6 282.0		3.0 2.0 170.0	3.0 2.5 175.0	3.0 2.5 175.0
15.0uH					2.3 1.0 350.0		

Note:

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. The DCR value is typical.
4. Isat is the DC current at which inductance drop 30%(Max) from its value without current.
5. Irms is the current that caused a approx 40°C temperature rise from 25°C ambient.



	MHA 0530NSG	MHA 0712NSG	MHA 0715NSG	MHA 0718NSG	MHA 0720NSG	MHA 0724NSG	MHA 0730NSG
Base (mm max)	5.75x5.4	7.3x6.8	7.3x6.8	7.3x6.8	7.3x6.8	7.3x6.8	7.3x6.8
Height (mm max)	3.0	1.2	1.5	1.8	2.0	2.4	3.0
Inductance	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR
	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ
0.1uH				45.0 18.0 2.5		60.0 25.5 1.85	60.0 32.5 1.7
0.15uH							40.0 30.0 2.5
0.20uH						33.0 17.0 3.2	34.0 21.0 3.0
0.22uH				29.0 14.0 5.2		33.0 16.0 3.2	34.0 21.0 3.0
0.33uH			19.5 10.0 7.8	22.0 12.0 6.8		24.0 15.0 4.1	25.0 21.0 3.5
0.36uH							22.0 19.0 3.9
0.47uH	15.0 12.0 7.5		16.0 9.8 8.5	18.0 11.0 8.4		21.0 13.0 5.1	20.0 18.0 4.1
0.56uH		11.0 7.0 15.5	14.0 9.0 11.0			17.0 12.0 6.5	18.0 15.0 4.9
0.68uH	12.0 8.5 9.8	9.0 6.7 17.5	12.0 8.5 12.0	17.0 9.0 12.7			17.0 14.0 5.7
0.75uH	12.0 8.0 13.0						
0.82uH		8.0 6.3 24.5	10.0 7.0 17.0			15.0 10.0 9.5	16.0 12.0 6.9
1.0uH	11.0 7.0 14.0	7.5 6.0 29.0	9.0 5.5 21.0	12.0 7.0 17.0	12.5 8.0 10.8	15.0 9.0 13.5	15.0 11.0 7.5
1.2uH	11.0 6.5 16.0		8.5 5.4 30.0				14.0 10.0 10.5
1.5uH	8.0 6.0 20.0			10.0 6.5 26.0	10.5 6.5 24.0	11.0 8.0 20.0	14.0 9.0 12.1
1.8uH							13.0 7.5 16.0
2.0uH				8.0 6.0 32.0			
2.2uH	9.0 5.5 33.0	5.0 4.0 59.0	6.0 3.5 54.0	8.0 6.0 35.0	8.0 5.5 27.5	9.0 6.0 28.0	10.0 7.0 17.5
2.5uH							10.0 6.5 18.0
3.3uH	6.0 5.0 38.0	4.0 3.0 92.0	5.5 3.3 63.0	7.0 3.5 60.0	7.0 4.0 43.0	7.0 5.0 39.0	9.5 6.0 26.0
4.7uH	5.0 4.0 60.0	3.5 2.7 122.0	5.0 3.2 85.0	5.0 3.5 70.0	5.5 3.5 65.0	6.0 4.5 50.0	6.5 5.5 38.0
5.6uH	4.5 3.8 63.0					6.0 4.0 60.0	6.25 5.0 42.0
6.8uH	4.3 3.5 76.0	2.8 2.2 210.0	4.0 2.5 135.0	3.5 2.8 110.0	4.0 3.0 95.0	5.0 4.0 70.0	6.0 4.5 48.0
8.2uH	4.0 3.25 105.0			3.0 2.5 135.0		5.0 3.5 86.0	6.0 4.0 65.0
10.0uH	3.5 2.7 130.0	2.2 2.0 290.0	3.0 2.0 175.0	2.5 2.3 155.0		4.0 3.1 101.1	5.0 4.0 68.0
12.0uH							4.5 3.0 98.0
15.0uH	2.2 1.8 165.0			2.2 1.8 250.0		3.3 2.5 160.0	3.8 2.8 115.0
22.0uH							3.1 1.5 189.0
33.0uH							2.9 1.0 257.0

Note:

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. The DCR value is typical.
4. Isat is the DC current at which inductance drop 30%(Max) from its value without current.
5. Irms is the current that caused a approx 40°C temperature rise from 25°C ambient.



	MHA 0750NSG	MHA 1040NSG	MHA 1050NSG	MHA 1235NSG	MHA 1250NSG	MHA 1260NSG	MHA 1770NSG	MHA 2213SG
Base (mm max)	7.3x6.8	11.3x10.3	11.3x10.3	13.7x12.9	13.7x12.9	13.7x12.9	17.50x17.15	22.8x22.3
Height (mm max)	5.0	4.0	5.0	3.5	5.0	6.0	7.0	13.0
Inductance	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR
	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ
0.13uH	48.0 42.0 1.2							
0.22uH	35.0 30.0 1.3	55.0 32.0 1.0	60.0 37.0 0.8	55.0 38.0 1.2	75.0 51.0 0.8			
0.26uH			60.0 35.0 1.0					
0.36uH	25.0 21.0 3.1	50.0 30.0 1.2			60.0 41.0 1.1			
0.39uH		45.0 26.0 1.2						
0.40uH	23.0 20.0 3.5							
0.45uH		42.0 26.0 1.3						
0.47uH	21.0 20.0 3.75	40.0 25.0 1.68			56.0 35.0 1.4		75.0 60.0 0.95	100.0 80.0 0.67
0.56uH	20.0 18.0 3.6	33.0 25.0 1.8		44.0 29.0 2.0				
0.68uH	18.0 16.5 4.2	30.0 23.0 2.4		42.0 28.0 2.3				
0.82uH	17.0 16.0 4.9			37.0 25.0 2.9				
1.0uH	15.0 12.5 6.5	28.0 18.0 3.3	29.0 19.0 2.6	34.0 24.0 3.4	35.0 26.0 2.2		54.0 49.5 1.45	71.0 69.0 0.89
1.2uH	13.0 12.0 7.5		28.0 18.0 3.1	27.0 20.0 3.8				
1.5uH	12.0 9.5 10.0	26.0 15.0 4.2	26.0 16.0 3.8	26.0 18.0 4.7	32.0 23.0 3.2		40.0 40.0 2.15	50.0 50.0 1.15
1.8uH		23.0 13.0 5.8						
2.0uH		20.0 12.0 6.9						
2.2uH	10.0 9.0 12.5	18.0 12.0 7.0	20.0 13.0 6.0	20.0 14.0 6.9	25.0 15.0 5.0		34.0 37.0 2.5	48.0 48.0 1.25
3.3uH	9.0 8.5 20.9	16.0 10.0 11.8	16.0 12.0 11.0	16.0 13.0 9.5	23.0 12.0 9.0			41.0 41.0 1.77
4.7uH	8.0 6.0 29.0	13.0 8.5 20.0	15.0 9.0 15.0	15.0 9.0 17.0	17.0 11.0 14.0		24.0 27.0 4.72	37.0 37.0 1.84
5.6uH	7.0 6.0 34.4	11.0 8.0 23.0		14.0 8.0 19.0	15.0 10.5 15.0			
6.8uH	6.0 5.5 41.0	10.0 7.0 25.0	14.0 8.5 18.5	13.0 7.0 22.0	14.0 10.0 18.0	15.0 11.5 13.8	22.0 20.0 7.55	36.0 36.0 3.09
8.2uH	5.5 5.5 43.0	9.0 7.0 27.0		12.0 6.5 28.0	13.0 9.0 20.0	13.5 11.0 16.0	20.0 16.0 8.7	
10.0uH	5.3 4.5 60.0	8.5 6.5 30.0	10.0 8.0 28.0	10.0 6.0 29.0	12.0 8.0 25.0	12.5 10.0 20.7	18.0 14.0 10.0	28.0 28.0 4.14
12.0uH	5.0 4.0 65.0					10.0 7.0 23.0		
15.0uH	4.0 3.1 90.0	7.0 6.25 45.0				9.0 6.0 29.0	13.0 12.0 15.0	24.0 23.5 6.11
18.0uH	3.5 3.0 105.0					8.0 5.0 35.0		
20.0uH							12.0 9.7 21.9	
22.0uH	3.5 2.6 140.0	5.5 5.0 66.0	6.0 5.5 50.0			7.5 5.0 39.5	11.0 9.5 23.0	16.0 17.5 10.8
27.0uH						6.5 4.0 56.0		
33.0uH	3.0 2.3 190.0	4.5 4.0 92.0	5.0 4.5 76.0			6.0 4.0 75.0	10.0 9.0 37.0	10.5 15.5 15.4
47.0uH	2.8 2.0 290.0	3.5 3.3 145.0				5.5 3.5 90.0	7.5 6.8 47.0	10.0 13.5 17.7
68.0uH		3.0 2.0 210.0				4.5 3.25 130.0	6.5 5.2 85.0	9.5 12.0 29.5
82.0uH						4.0 3.0 140.0		9.0 10.2 34.2
100.0uH						3.5 2.5 200.0		7.0 9.1 39.4
120.0uH						3.2 2.3 235.0		
150.0uH						2.7 2.0 350.0		



	<b>MHCT 252012NSG</b>						
Base (mm max)	2.7x2.2						
Height (mm max)	1.2						
Inductance	Isat Irms DCR						
	A A mΩ						
0.10uH							
0.15uH							
0.22uH							
0.24uH							
0.33uH	7.5 4.7 22						
0.47uH	6.5 4.0 33						
0.50uH							
0.56uH							
0.68uH	5.8 3.5 36						
0.82uH							
1.0uH	5.0 3.3 42						
1.5uH	4.6 2.3 62						
2.2uH	4.2 2.2 84						
3.3uH	1.8 1.0 220						
4.7uH							
5.6uH							
6.8uH							
8.2uH							
10.0uH							
15.0uH							

**Note:**

1. Electrical specification at 25°C.
2. Inductance tested at 1MHz, 0.25Vrms.
3. The DCR value is typical.
4. Isat is the DC current at which inductance drop 30%(Max) from its value without current.
5. Irms is the current that caused a approx 40°C temperature rise from 25°C ambient.





	<b>MHC 0412SG</b>	<b>MHC 0420SG</b>	<b>MHC 0512SG</b>	<b>MHC 0520SG</b>	<b>MHC 0530SG</b>	<b>MHC 0718SG</b>	<b>MHC 0724SG</b>
Base (mm max)	4.7x4.3	4.7x4.3	5.75x5.4	5.75x5.4	5.75x5.4	7.3x6.8	7.3x6.8
Height (mm max)	1.2	2.0	1.2	2.0	3.0	1.8	2.4
Inductance	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR
	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ
0.047uH	32.0 13.0 3.75						
0.1uH	25.0 11.5 6.0	35.0 16.0 5.0	35.0 13.5 4.6	45.0 17.0 3.9	27.0 23.0 3.16	40.0 18.0 3.5	50.0 30.0 1.7
0.15uH						38.0 15.0 5.2	
0.20uH							
0.22uH	20.0 8.5 12.0	24.0 13.0 8.6		22.0 15.0 5.2	21.0 15.5 4.52	26.0 14.0 5.7	34.0 21.0 3.2
0.33uH				25.0 12.0 8.2	19.0 13.7 5.56	18.0 12.0 7.0	22.0 18.0 4.1
0.36uH							
0.47uH	13.0 5.0 22.0	11.5 5.6 18.0	18.0 6.5 19.2	21.0 11.5 9.4	16.0 12.2 7.04	18.0 11.0 9.3	21.0 13.5 6.5
0.56uH							
0.68uH	9.3 4.9 31.4			15.0 10.0 12.4	13.5 10.2 8.96	17.0 9.0 13.9	18.0 11.0 9.4
0.82uH					13.0 9.3 11.9	17.0 8.0 15.9	17.0 10.0 11.8
1.0uH	7.0 4.0 52.5	8.5 3.75 37.0	10.2 4.4 46.5	16.0 7.0 20.0	12.0 9.2 13.7	14.0 7.0 18.3	16.0 9.0 14.2
1.5uH		6.1 5.1 46.3			11.0 7.2 20.7	11.5 4.0 34.0	15.0 7.5 21.2
2.2uH		6.0 2.85 90.0	6.0 3.4 77.3	9.5 4.2 50.1	10.0 5.8 29.2	13.0 3.75 46.0	14.0 6.5 34.0
2.5uH						10.4 3.5 52.4	
3.3uH			5.0 2.8 103.0	8.5 3.3 85.5	8.5 5.0 54.7	10.0 3.25 60.1	13.0 5.0 51.6
4.7uH			4.4 2.2 168.0	5.0 2.8 116.6	8.2 3.5 77.5	8.0 3.0 78.0	10.0 4.5 63.0
5.6uH				4.5 2.5 122.2	4.1 3.0 108.0		
6.8uH				4.3 2.4 150.0			9.0 3.5 95.0
8.2uH							8.0 3.0 106.0
10.0uH				4.0 2.3 199.0	4.0 2.5 164.0		7.0 2.5 129.0
15.0uH					2.5 1.9 265.0		

Note:

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. The DCR value is typical.
4. Isat is the DC current at which inductance drop 20%(Max) from its value without current.
5. Irms is the current that caused a approx 40°C temperature rise from 25°C ambient.



	<b>MHC 0730SG</b>	<b>MHC 0750SG</b>	<b>MHC 1040SG</b>	<b>MHC 1235SG</b>	<b>MHC 1250SG</b>	<b>MHC 1264SG</b>	<b>MHC 1770SG</b>
Base (mm max)	<b>7.3x6.8</b>	<b>7.3x6.8</b>	<b>11.1x10.3</b>	<b>13.7x12.9</b>	<b>13.7x12.9</b>	<b>13.7x12.9</b>	<b>17.50x17.15</b>
Height (mm max)	<b>3.0</b>	<b>5.0</b>	<b>4.0</b>	<b>3.5</b>	<b>5.0</b>	<b>6.4</b>	<b>7.0</b>
Inductance	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR	Isat Irms DCR
	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ	A A mΩ
0.1uH	60.0 32.5 1.7			84.0 43.0 0.96	118.0 55.0 0.6	120.0 60.0 0.5	
0.15uH	52.0 26.0 2.5			75.0 41.0 1.2		118.0 55.0 0.6	
0.19uH			90.0 40.0 0.95				
0.20uH	41.0 24.0 2.8						
0.22uH	40.0 23.0 3.0			65.0 38.5 1.3	110.0 51.0 0.8	112.0 53.0 0.7	129.0 80.0 0.75
0.30uH						72.0 48.0 0.8	
0.33uH	30.0 20.0 3.9			62.0 36.5 1.5	80.0 42.0 1.1	65.0 46.0 0.9	126.0 65.0 0.82
0.36uH			60.0 31.5 1.4				
0.40uH						64.0 44.0 1.0	
0.47uH	26.0 17.5 4.2		49.0 27.5 1.8	55.0 32.0 2.0	65.0 38.0 1.3	63.0 41.0 1.2	123.0 62.0 1.03
0.56uH	25.5 16.5 5.0	12.0 20.0 3.6	49.0 27.5 1.8		55.0 36.0 1.5	62.0 37.0 1.4	88.0 56.0 1.05
0.60uH				51.0 29.0 2.2			
0.68uH	25.0 15.5 5.5	11.5 18.0 4.5	39.0 22.0 2.7	49.0 28.0 2.5	54.0 34.0 1.7	60.0 35.0 1.6	78.0 52.0 1.20
0.82uH	24.0 13.0 8.0	13.0 16.5 4.9		44.0 25.0 3.0	53.0 31.0 2.3	50.0 33.0 1.9	73.0 50.0 1.29
1.0uH	22.0 11.0 10.0	15.0 13.0 6.5	36.0 17.5 4.1	40.0 24.0 3.5	50.0 29.0 2.5	49.0 32.0 2.0	73.0 48.0 1.38
1.2uH						48.0 30.0 2.5	
1.5uH	18.0 9.0 15.0	12.0 12.0 9.0	27.5 15.0 5.8	35.0 19.0 5.5	48.0 23.0 4.1	45.0 27.0 3.0	65.0 42.0 1.88
1.8uH				30.0 16.5 7.0	40.0 19.0 4.9	41.0 24.0 3.2	65.0 38.0 2.10
2.2uH	14.0 8.0 20.0	10.0 10.0 13.6	25.6 12.0 9.0	29.0 16.0 8.0	32.0 20.0 5.5	40.0 22.0 4.2	41.0 35.0 2.53
2.5uH							
3.3uH	13.5 6.0 30.0	8.0 8.0 20.9	18.6 10.0 14.4	27.0 12.0 12.0	32.0 15.0 9.2	35.0 18.0 6.8	40.0 28.0 3.88
4.7uH	10.0 5.5 40.0	7.0 6.5 30.3	17.0 9.5 16.5	24.0 10.0 15.0	27.0 12.0 15.0	32.0 13.5 8.7	40.0 25.0 5.11
5.6uH	9.0 5.0 50.0	7.0 6.0 34.4	16.0 8.5 19.3	19.0 9.5 19.0	22.0 11.5 16.5	30.0 12.5 10.0	40.0 21.0 7.05
6.8uH	8.0 4.5 60.0	5.5 5.5 44.6	13.5 8.0 23.3	18.0 9.0 22.0	21.0 11.0 18.5	16.5 11.5 14.0	32.0 19.0 8.83
7.8uH					18.0 10.0 20.5		
8.2uH	7.5 4.0 68.0	5.0 5.0 50.7		16.0 8.5 28.0	18.0 9.5 22.5	16.0 10.5 15.5	25.0 18.0 10.66
10.0uH	7.0 3.0 105.0	4.5 4.5 71.3	12.0 6.8 36.5	14.0 7.0 34.0	16.0 9.0 25.5	15.5 10.0 17.2	25.0 16.5 12.0
15.0uH							25.0 12.5 19.9
22.0uH							23.0 11.0 26.0
33.0uH							16.0 9.0 37.0

Note:

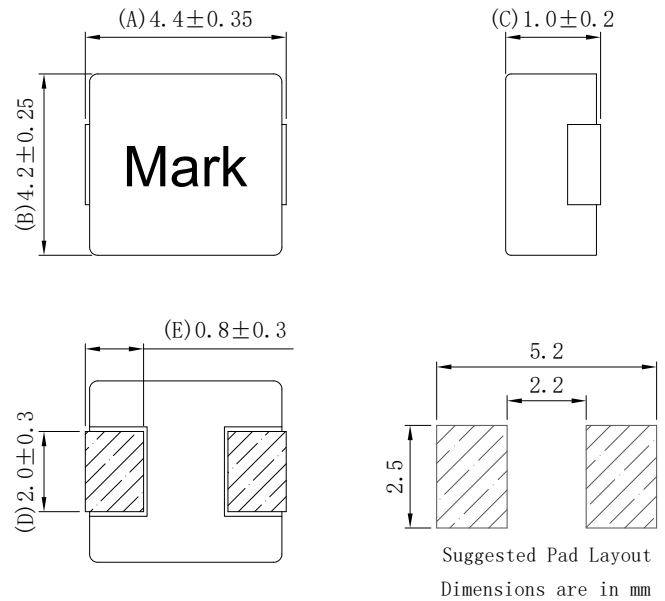
1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. The DCR value is typical.
4. Isat is the DC current at which inductance drop 20%(Max) from its value without current.
5. Irms is the current that caused a approx 40°C temperature rise from 25°C ambient.

### FEATURES

- RoHS compliant, UL94V-0
- Small size (4.75\*4.45mm Max), low profile (Height: 1.2mm Max)
- Inductance range from 0.33uH to 4.7uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications



Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) @ 25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0412NSGR33M	0.33	17.00	19.00	6.50	8.40	R33
MHA0412NSGR47M	0.47	19.00	21.00	6.00	6.80	R47
MHA0412NSGR68M	0.68	32.00	36.00	4.50	6.00	R68
MHA0412NSG1R0M	1.00	43.00	47.00	4.20	5.20	1R0
MHA0412NSG1R5M	1.50	68.00	75.00	3.25	4.00	1R5
MHA0412NSG2R2M	2.20	79.40	83.50	2.75	3.50	2R2
MHA0412NSG4R7M	4.70	175.0	195.0	1.80	2.80	4R7

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape & Reel	3000 pcs per reel
Weight	0.12g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

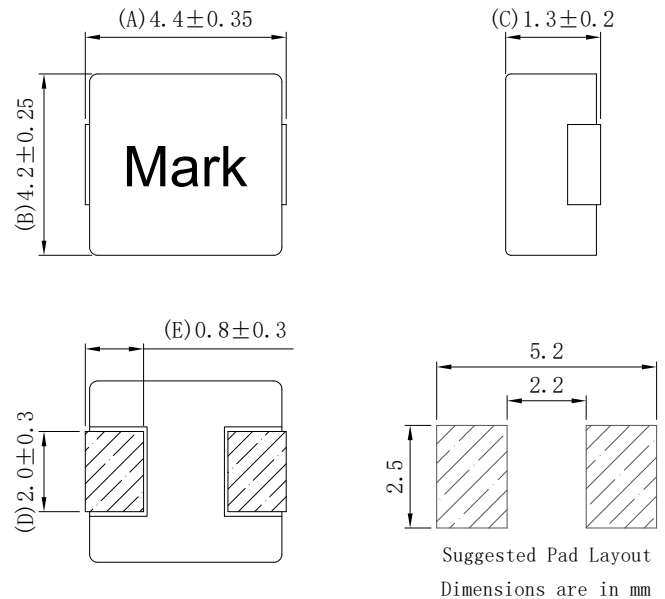
### FEATURES

- RoHS compliant,UL94V-0
- Small size (4.75\*4.45mm Max),low profile(Height:1.5mm Max)
- Inductance range from 0.22uH to 1.50uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0415NSGR22M	0.22	7.80	9.00	7.00	14.0	R22
MHA0415NSG1R5M	1.50	49.00	63.00	4.00	6.00	1R5



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	3000pcs per reel
Weight	0.15g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

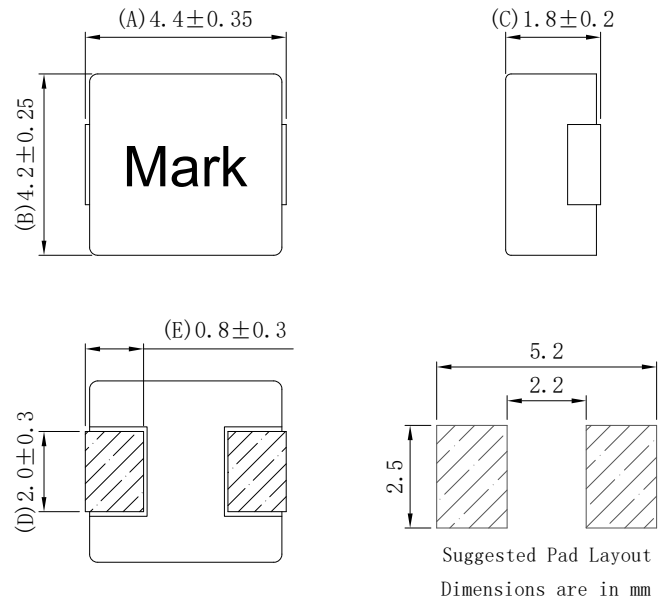
### FEATURES

- RoHS compliant,UL94V-0
- Small size (4.75\*4.45mm Max),low profile(Height:2.0mm Max)
- Inductance range from 0.1uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ )@25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0420NSGR10M	0.10	3.50	4.00	12.0	22.0	R10
MHA0420NSGR22M	0.22	6.00	6.60	9.00	12.5	R22
MHA0420NSGR33M	0.33	8.00	9.00	8.00	11.0	R33
MHA0420NSGR47M	0.47	12.50	14.00	7.00	9.50	R47
MHA0420NSGR56M	0.56	14.00	16.00	6.50	9.00	R56
MHA0420NSGR68M	0.68	16.00	18.00	5.20	8.00	R68
MHA0420NSG1R0M	1.00	24.00	27.00	4.50	7.00	1R0
MHA0420NSG1R2M	1.20	24.00	27.00	4.50	7.00	1R2
MHA0420NSG1R5M	1.50	38.00	46.00	4.00	6.00	1R5
MHA0420NSG2R2M	2.20	52.00	58.00	3.00	5.00	2R2
MHA0420NSG3R3M	3.30	74.00	87.00	2.50	4.00	3R3
MHA0420NSG4R7M	4.70	92.00	105.0	2.20	3.00	4R7
MHA0420NSG6R8M	6.80	162.0	178.0	2.00	2.50	6R8
MHA0420NSG8R2M	8.20	188.0	207.0	1.80	2.00	8R2
MHA0420NSG100M	10.0	256.0	282.0	1.60	1.80	100



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	3000pcs per reel
Weight	0.19g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

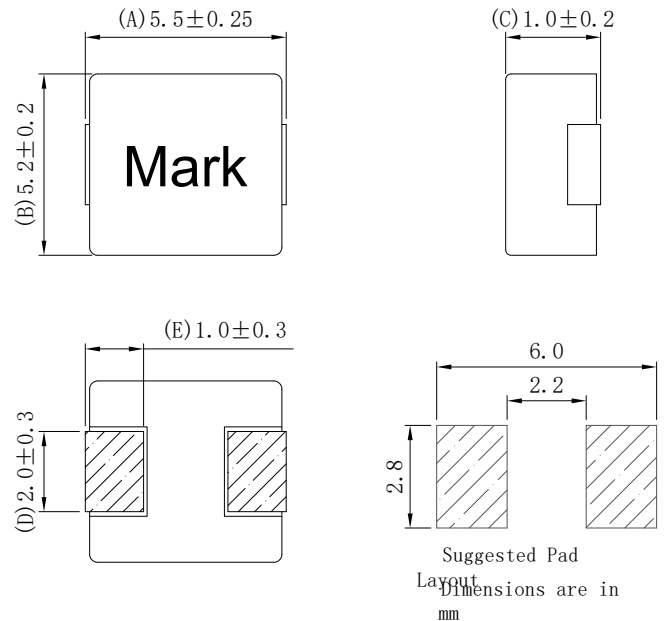
### FEATURES

- RoHS compliant,UL94V-0
- Small size (5.75\*5.4mm Max),low profile(Height:1.2mm Max)
- Inductance range from 1.0uH to 6.8uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) @25°C		I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
		TYP.	MAX.			
MHA0512NSG1R0M	1.00	32.00	36.80	5.10	7.60	1r0
MHA0512NSG2R2M	2.20	67.00	76.00	3.50	4.00	2R2
MHA0512NSG3R3M	3.30	85.00	98.00	3.00	3.70	3R3
MHA0512NSG4R7M	4.70	145.0	163.0	2.30	3.40	4R7
MHA0512NSG6R8M	6.80	225.0	250.0	2.00	2.30	6R8



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	3000pcs per reel
Weight	0.18g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

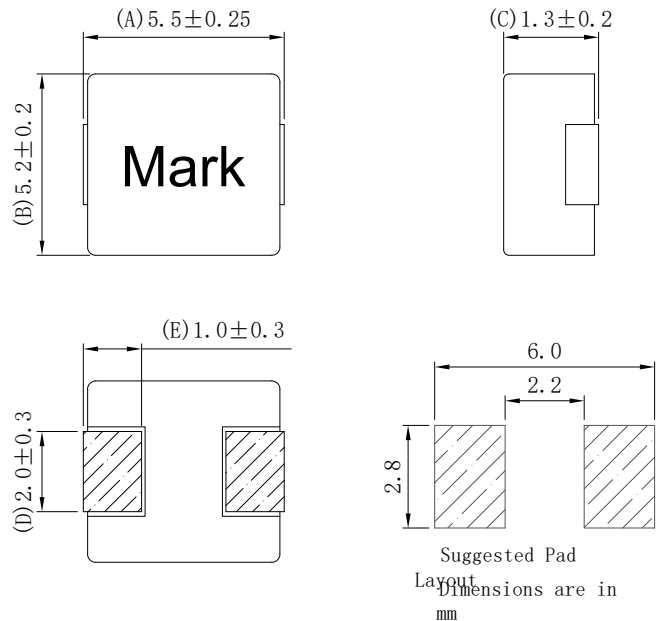
### FEATURES

- RoHS compliant, UL94V-0
- Small size (5.75\*5.4mm Max), low profile (Height: 1.5mm Max)
- Inductance range from 0.33uH to 15.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0515NSGR33M	0.33	8.00	9.00	10.0	15.0	R33
MHA0515NSGR47M	0.47	10.80	12.70	9.00	12.7	R47
MHA0515NSGR68M	0.68	13.50	15.50	8.10	9.50	R68
MHA0515NSG1R0M	1.00	20.00	23.00	6.50	9.00	1R0
MHA0515NSG2R2M	2.20	58.00	64.00	3.30	6.00	2R2
MHA0515NSG3R3M	3.30	65.00	72.00	3.20	5.00	3R3
MHA0515NSG4R7M	4.70	95.00	106.0	3.00	4.00	4R7
MHA0515NSG6R8M	6.80	120.0	130.0	2.50	3.20	6R8



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape & Reel	3000 pcs per reel
Weight	0.22g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



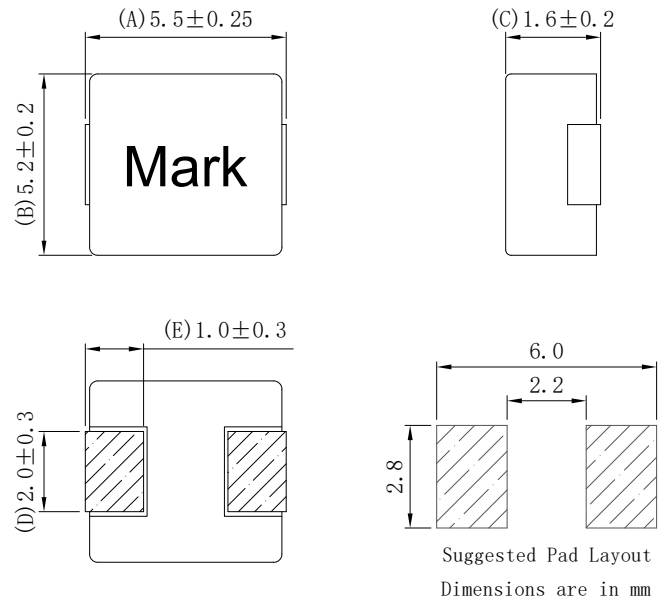
### FEATURES

- RoHS compliant, UL94V-0
- Small size (5.75\*5.4mm Max), low profile (Height: 1.8mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) @25°C		I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
		TYP.	MAX.			
MHA0518NSGR10M	0.10	2.50	3.10	20.0	30.0	R10
MHA0518NSGR12M	0.12	2.60	3.30	19.0	27.0	R12
MHA0518NSGR15M	0.15	3.00	3.60	18.5	24.0	R15
MHA0518NSGR22M	0.22	4.00	4.80	17.0	20.0	R22
MHA0518NSGR33M	0.33	5.70	6.80	15.0	17.1	R33
MHA0518NSGR47M	0.47	7.80	8.50	10.0	15.5	R47
MHA0518NSGR56M	0.56	8.00	10.00	9.50	15.0	R56
MHA0518NSGR68M	0.68	12.00	13.80	8.00	11.2	R68
MHA0518NSG1R0M	1.00	15.00	18.00	7.50	9.00	1R0
MHA0518NSG1R2M	1.20	17.00	20.00	7.50	8.00	1R2
MHA0518NSG1R5M	1.50	23.00	28.00	5.50	7.20	1R5
MHA0518NSG2R2M	2.20	30.00	35.00	5.00	6.50	2R2
MHA0518NSG3R3M	3.30	52.00	58.00	4.50	5.00	3R3
MHA0518NSG4R7M	4.70	78.00	85.00	3.50	4.00	4R7
MHA0518NSG6R8M	6.80	107.0	120.0	2.60	3.40	6R8
MHA0518NSG100M	10.0	145.0	154.0	2.30	2.80	100



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.25g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



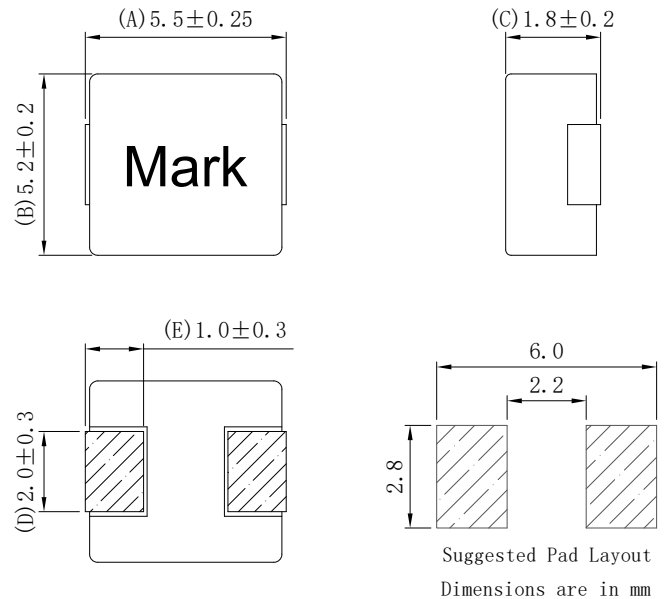
### FEATURES

- RoHS compliant
- Small size (5.75\*5.4mm Max),low profile(Height:2.0mm Max)
- Inductance range from 0.22uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0520NSGR22M	0.22	3.80	4.50	15.0	18.7	R22
MHA0520NSGR56M	0.56	8.00	10.00	9.50	15.0	R56
MHA0520NSGR68M	0.68	12.00	13.60	8.00	11.2	R68
MHA0520NSG1R0M	1.00	15.00	17.00	7.50	9.00	1R0
MHA0520NSG1R5M	1.50	25.00	30.00	5.50	8.00	1R5
MHA0520NSG2R2M	2.20	30.00	34.00	5.00	7.00	2R2
MHA0520NSG3R3M	3.30	52.00	58.00	4.50	5.00	3R3
MHA0520NSG4R7M	4.70	70.00	78.00	3.50	4.00	4R7
MHA0520NSG6R8M	6.80	107.0	120.0	2.80	3.40	6R8
MHA0520NSG8R2M	8.20	140.0	150.0	2.60	3.10	8R2
MHA0520NSG100M	10.0	150.0	175.0	2.50	3.00	100



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.29g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

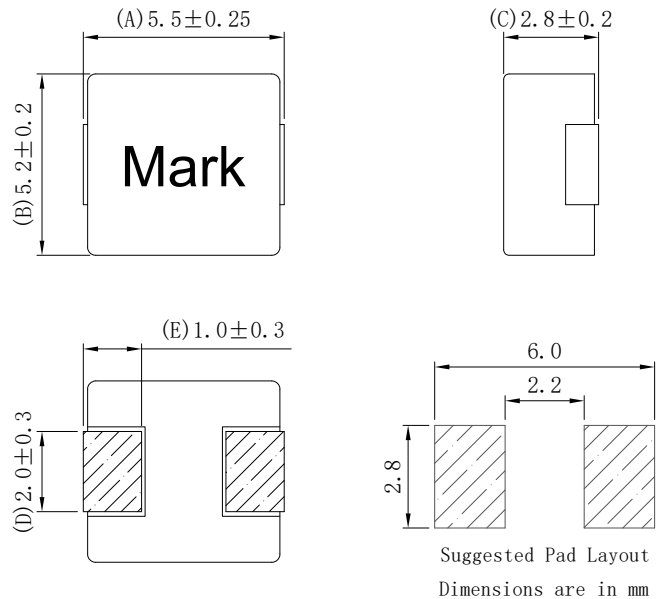
### FEATURES

- RoHS compliant
- Small size (5.75\*5.4mm Max),low profile(Height:3.0mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0530NSGR10M	0.10	2.00	2.30	22.0	33.0	R10
MHA0530NSGR22M	0.22	3.50	3.90	15.0	18.0	R22
MHA0530NSGR33M	0.33	5.00	5.50	14.0	15.0	R33
MHA0530NSGR47M	0.47	6.50	7.50	12.0	12.5	R47
MHA0530NSGR68M	0.68	8.50	9.80	8.50	12.0	R68
MHA0530NSG1R0M	1.00	13.00	14.00	8.00	9.50	1R0
MHA0530NSG1R5M	1.50	16.00	20.00	6.00	8.00	1R5
MHA0530NSG2R2M	2.20	25.00	29.00	5.50	6.50	2R2
MHA0530NSG3R3M	3.30	34.00	38.00	5.00	5.50	3R3
MHA0530NSG4R7M	4.70	48.00	54.00	4.50	5.00	4R7
MHA0530NSG5R6M	5.60	55.00	63.00	3.80	4.50	5R6
MHA0530NSG6R8M	6.80	75.00	84.00	3.20	4.00	6R8
MHA0530NSG100M	10.0	115.0	130.0	2.70	3.00	100



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.44g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

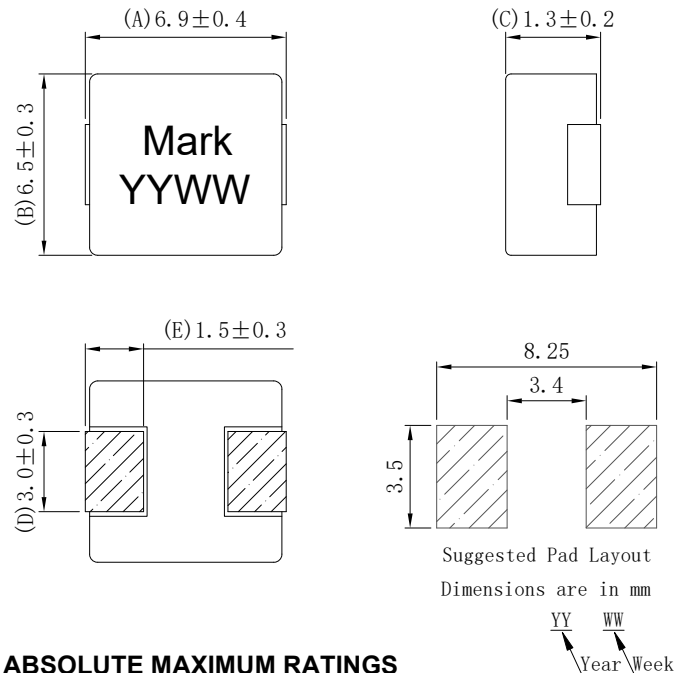
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max), low profile (Height: 1.5mm Max)
- Inductance range from 0.33uH to 4.7uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR (m $\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0715NSGR33M	0.33	6.80	7.80	10.0	19.5	R33M
MHA0715NSGR47M	0.47	7.30	8.50	9.80	16.0	R47M
MHA0715NSGR68M	0.68	10.50	12.00	8.50	12.0	R68M
MHA0715NSGR82M	0.82	15.00	17.00	7.00	10.0	R82M
MHA0715NSG1R0M	1.00	18.50	21.00	5.50	9.00	1R0M
MHA0715NSG1R5M	1.50	35.00	40.00	5.00	7.00	1R5M
MHA0715NSG2R2M	2.20	46.00	54.00	4.50	6.00	2R2M
MHA0715NSG3R3M	3.30	54.00	63.00	4.00	5.50	3R3M
MHA0715NSG4R7M	4.70	76.00	85.00	3.50	5.00	4R7M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.35g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

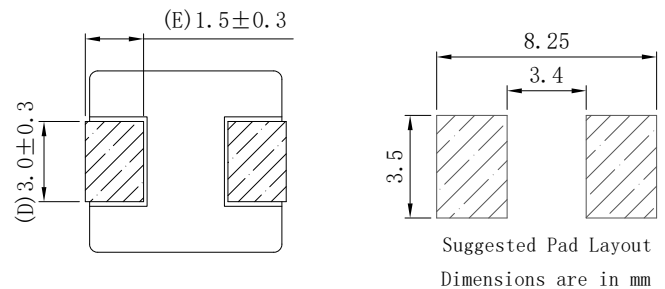
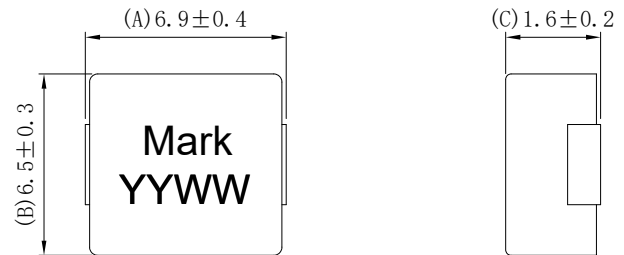
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:1.8mm Max)
- Inductance range from 0.10uH to 4.7uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0718NSGR10M	0.10	2.00	2.50	21.0	45.0	R10M
MHA0718NSGR15M	0.15	2.85	3.20	20.0	31.0	R15M
MHA0718NSGR22M	0.22	4.50	5.20	14.0	29.0	R22M
MHA0718NSGR33M	0.33	5.20	6.80	12.0	22.0	R33M
MHA0718NSGR47M	0.47	7.30	8.40	11.0	18.0	R47M
MHA0718NSGR68M	0.68	10.80	12.70	9.00	17.0	R68M
MHA0718NSG1ROM	1.00	14.50	17.00	7.00	12.0	1R0M
MHA0718NSG1R5M	1.50	20.00	26.00	6.50	10.0	1R5M
MHA0718NSG2ROM	2.00	28.00	32.00	6.00	8.00	2R0M
MHA0718NSG2R2M	2.20	31.00	35.00	6.00	8.00	2R2M
MHA0718NSG3R3M	3.30	56.00	60.00	3.50	7.00	3R3M
MHA0718NSG4R7M	4.70	68.00	70.00	3.50	5.00	4R7M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang  
(Including coil' self temperature rise)  
Storage temperature rang

-55 $^{\circ}$ C to +125 $^{\circ}$ C

-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature  
Pin finish

250 $^{\circ}$ C  
tin

### PACKAGING INFORMATION

Tape&Reel  
Weight

2000pcs per reel  
0.44g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

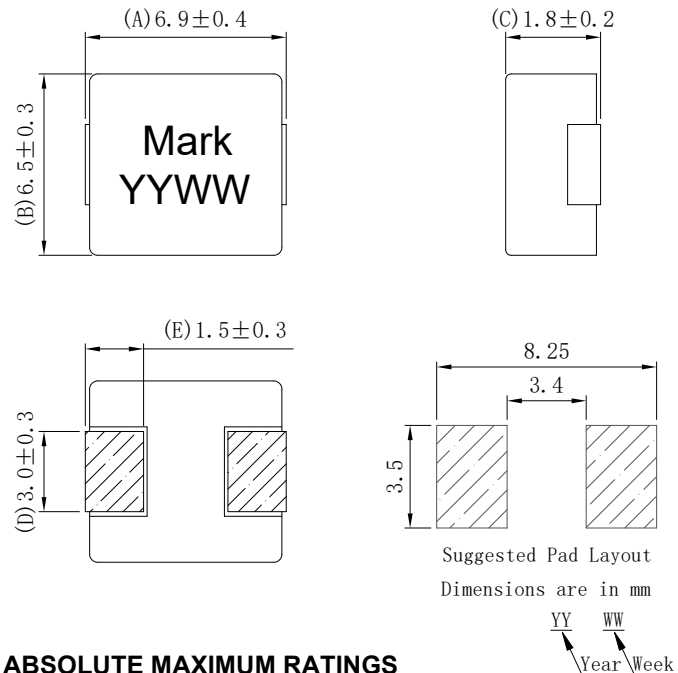
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:2.0mm Max)
- Inductance range from 1.0uH to 6.8uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0720NSG1R0M	1.00	9.80	10.80	8.00	12.5	1R0M
MHA0720NSG1R5M	1.50	20.00	24.00	6.50	10.5	1R5M
MHA0720NSG2R2M	2.20	24.40	27.50	5.50	8.00	2R2M
MHA0720NSG3R3M	3.30	40.00	43.00	4.00	7.00	3R3M
MHA0720NSG4R7M	4.70	62.00	65.00	3.50	5.50	4R7M
MHA0720NSG6R8M	6.80	85.00	95.00	3.00	4.00	6R8M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.48g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

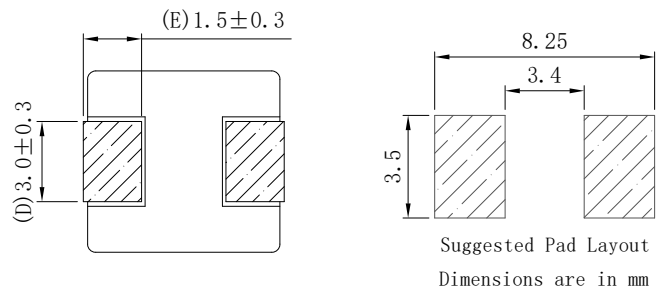
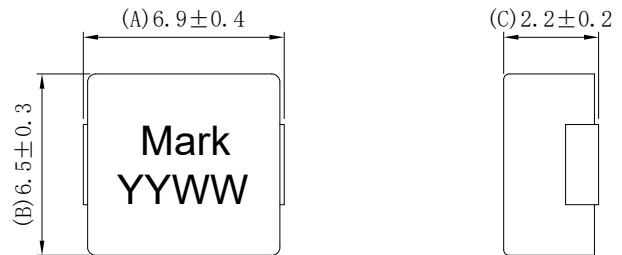
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:2.4mm Max)
- Inductance range from 0.10uH to 15.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR(m $\Omega$ )@25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0724NSGR10M	0.10	1.60	1.85	22.5	60.0	R10M
MHA0724NSGR15M	0.15	2.30	2.85	20.0	34.0	R15M
MHA0724NSGR20M	0.20	2.60	3.20	17.0	33.0	R20M
MHA0724NSGR22M	0.22	2.60	3.20	16.0	33.0	R22M
MHA0724NSGR33M	0.33	3.50	4.10	15.0	24.0	R33M
MHA0724NSGR47M	0.47	4.50	5.10	13.0	21.0	R47M
MHA0724NSGR56M	0.56	5.90	6.50	12.0	17.0	R56M
MHA0724NSGR82M	0.82	8.30	9.50	10.0	15.5	R82M
MHA0724NSG1R0M	1.00	11.20	13.50	9.00	15.0	1R0M
MHA0724NSG1R5M	1.50	17.00	20.00	8.00	11.0	1R5M
MHA0724NSG2R2M	2.20	23.00	28.00	6.00	9.00	2R2M
MHA0724NSG3R3M	3.30	31.00	39.00	5.00	7.00	3R3M
MHA0724NSG4R7M	4.70	41.00	50.00	4.50	6.00	4R7M
MHA0724NSG5R6M	5.60	51.00	60.00	4.00	6.00	5R6M
MHA0724NSG6R8M	6.80	57.00	70.00	4.00	5.00	6R8M
MHA0724NSG8R2M	8.20	78.00	86.00	3.50	5.00	8R2M
MHA0724NSG100M	10.0	92.00	101.0	3.10	4.00	100M
MHA0724NSG150M	15.0	145.0	160.0	2.50	3.30	150M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1500pcs per reel
Weight	0.62g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.



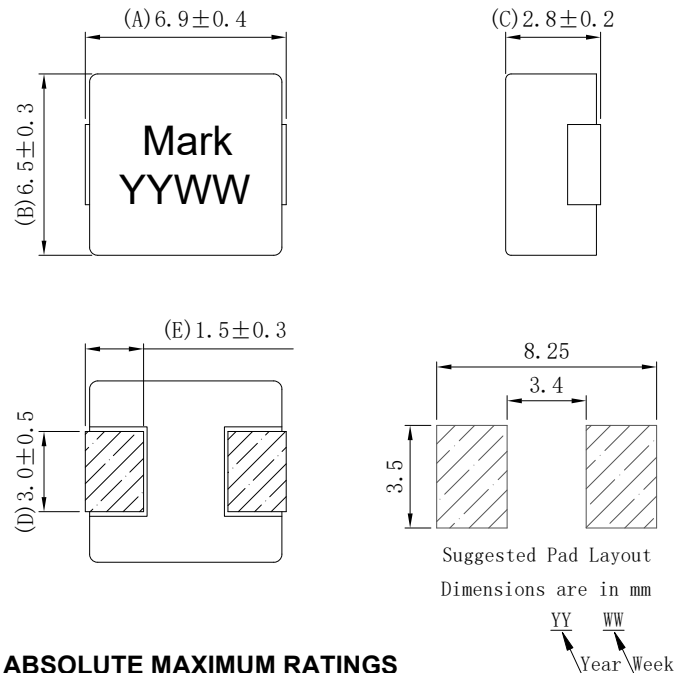
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max), low profile (Height: 3.0mm Max)
- Inductance range from 0.10uH to 33.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR (m $\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0730NSGR10M	0.10	1.50	1.70	32.5	60.0	R10M
MHA0730NSGR15M	0.15	1.90	2.50	30.0	40.0	R15M
MHA0730NSGR20M	0.20	2.40	3.00	21.0	34.0	R20M
MHA0730NSGR22M	0.22	2.50	3.00	21.0	34.0	R22M
MHA0730NSGR33M	0.33	3.00	3.50	21.0	25.0	R33M
MHA0730NSGR36M	0.36	3.30	3.90	19.0	22.0	R36M
MHA0730NSGR47M	0.47	3.50	4.10	18.0	20.0	R47M
MHA0730NSGR56M	0.56	4.25	4.90	15.0	18.0	R56M
MHA0730NSGR68M	0.68	5.00	5.70	14.0	17.0	R68M
MHA0730NSGR82M	0.82	6.00	6.90	12.0	16.0	R82M
MHA0730NSG1R0M	1.00	7.00	7.50	11.0	15.0	1R0M
MHA0730NSG1R2M	1.20	8.00	10.50	10.0	14.0	1R2M
MHA0730NSG1R5M	1.50	10.60	12.10	9.00	14.0	1R5M
MHA0730NSG1R8M	1.80	14.00	16.00	7.50	13.0	1R8M
MHA0730NSG2R2M	2.20	15.50	17.50	7.00	10.0	2R2M
MHA0730NSG2R5M	2.50	16.00	18.00	6.50	10.0	2R5M
MHA0730NSG3R3M	3.30	23.00	26.00	6.00	9.50	3R3M
MHA0730NSG4R7M	4.70	34.50	38.00	5.50	6.50	4R7M
MHA0730NSG5R6M	5.60	36.00	42.00	5.00	6.25	5R6M
MHA0730NSG6R8M	6.80	43.00	48.00	4.50	6.00	6R8M
MHA0730NSG8R2M	8.20	58.50	65.00	4.00	6.00	8R2M
MHA0730NSG100M	10.0	64.00	68.00	4.00	5.00	100M
MHA0730NSG120M	12.0	85.00	98.00	3.00	4.50	120M
MHA0730NSG150M	15.0	98.00	115.0	2.80	3.80	150M
MHA0730NSG220M	22.0	135.0	165.0	2.00	3.10	220M
MHA0730NSG330M	33.0	225.0	257.0	1.80	2.30	330M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1500pcs per reel
Weight	0.75g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

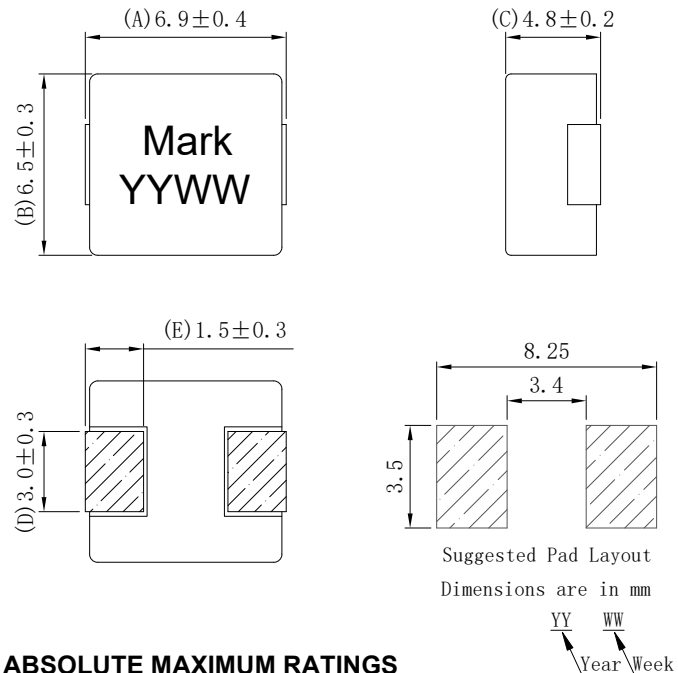
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:5.0mm Max)
- Inductance range from 0.13uH to 47.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR (m $\Omega$ ) @25 $^{\circ}\text{C}$		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA0750NSGR13M	0.13	1.00	1.20	42.0	48.0	R13M
MHA0750NSGR22M	0.22	1.10	1.30	30.0	35.0	R22M
MHA0750NSGR36M	0.36	2.70	3.10	21.0	25.0	R36M
MHA0750NSGR40M	0.40	3.20	3.50	20.0	23.0	R40M
MHA0750NSGR47M	0.47	3.25	3.75	20.0	21.0	R47M
MHA0750NSGR56M	0.56	3.40	3.60	18.0	20.0	R56M
MHA0750NSGR68M	0.68	3.90	4.20	16.5	18.0	R68M
MHA0750NSGR82M	0.82	4.60	4.90	16.0	17.0	R82M
MHA0750NSG1R0M	1.00	5.60	6.50	12.5	15.0	1R0M
MHA0750NSG1R2M	1.20	6.70	7.50	11.0	13.0	1R2M
MHA0750NSG1R5M	1.50	6.70	7.50	11.0	12.0	1R5M
MHA0750NSG2R2M	2.20	11.20	12.50	9.00	10.0	2R2M
MHA0750NSG3R3M	3.30	19.90	20.90	8.50	9.00	3R3M
MHA0750NSG4R7M	4.70	26.00	29.00	6.00	8.00	4R7M
MHA0750NSG5R6M	5.60	31.50	34.40	6.00	7.00	5R6M
MHA0750NSG6R8M	6.80	36.50	41.00	5.50	6.00	6R8M
MHA0750NSG8R2M	8.20	40.00	43.00	5.50	5.50	8R2M
MHA0750NSG100M	10.0	54.00	60.00	4.50	5.30	100M
MHA0750NSG120M	12.0	58.00	65.00	4.00	5.00	120M
MHA0750NSG150M	15.0	78.00	90.00	3.10	4.00	150M
MHA0750NSG180M	18.0	83.00	105.0	3.00	3.50	180M
MHA0750NSG220M	22.0	120.0	140.0	2.60	3.50	220M
MHA0750NSG330M	33.0	165.0	190.0	2.30	3.00	330M
MHA0750NSG470M	47.0	250.0	290.0	2.00	2.50	470M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$
Storage temperature rang	-55 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}\text{C}$
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1000pcs per reel
Weight	1.2g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}\text{C}$ .
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}\text{C}$  temperature rise from 25 $^{\circ}\text{C}$  ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}\text{C}$  under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.



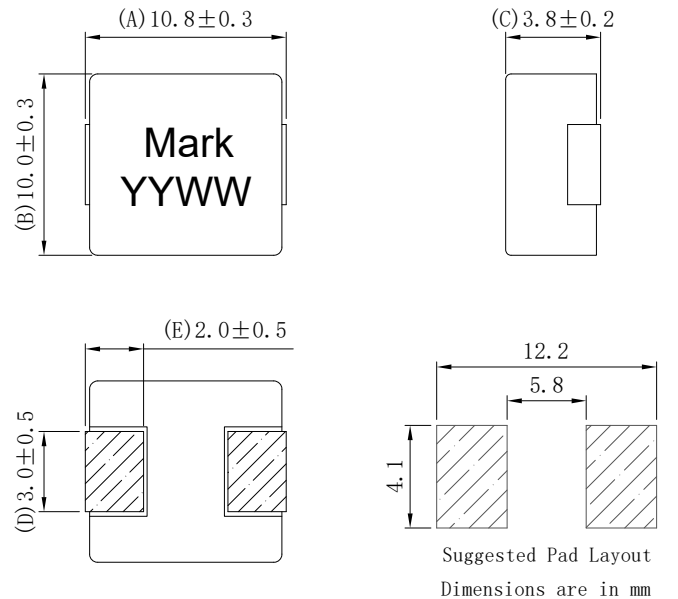
### FEATURES

- RoHS compliant
- Small size (11.1\*10.3mm Max),low profile(Height:4.0mm Max)
- Inductance range from 0.22uH to 47.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1040NSGR22M	0.22	0.90	1.00	32.0	60.0	R22M
MHA1040NSGR30M	0.30	1.00	1.10	30.0	52.0	R30M
MHA1040NSGR33M	0.33	1.00	1.10	30.0	50.0	R33M
MHA1040NSGR47M	0.47	1.53	1.68	25.0	40.0	R47M
MHA1040NSGR56M	0.56	1.60	1.80	25.0	33.0	R56M
MHA1040NSGR68M	0.68	2.10	2.40	23.0	30.0	R68M
MHA1040NSGR82M	0.82	2.40	2.80	21.0	29.0	R82M
MHA1040NSG1R0M	1.00	3.00	3.30	18.0	28.0	1R0M
MHA1040NSG1R2M	1.20	3.70	4.10	17.0	24.5	1R2M
MHA1040NSG1R5M	1.50	3.80	4.20	15.0	22.0	1R5M
MHA1040NSG1R8M	1.80	5.00	5.80	13.0	21.0	1R8M
MHA1040NSG2R0M	2.00	6.00	6.90	12.0	20.0	2R0M
MHA1040NSG2R2M	2.20	6.00	7.00	12.0	18.0	2R2M
MHA1040NSG3R3M	3.30	10.80	11.80	10.0	16.0	3R3M
MHA1040NSG4R7M	4.70	17.00	20.00	8.00	13.0	4R7M
MHA1040NSG5R6M	5.60	20.00	23.00	7.50	11.0	5R6M
MHA1040NSG6R8M	6.80	22.50	25.00	6.40	9.50	6R8M
MHA1040NSG8R2M	8.20	25.00	27.00	6.20	8.00	8R2M
MHA1040NSG100M	10.0	27.00	30.00	6.00	8.00	100M
MHA1040NSG150M	15.0	40.00	45.00	4.70	7.00	150M
MHA1040NSG220M	22.0	60.00	66.00	3.80	5.50	220M
MHA1040NSG330M	33.0	85.00	102.0	3.30	4.60	330M
MHA1040NSG470M	47.0	147.0	165.0	2.70	3.60	470M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang -55 $^{\circ}$ C to +125 $^{\circ}$ C  
(Including coil' self temperature rise)  
Storage temperature rang -55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature 250 $^{\circ}$ C  
Pin finish tin

### PACKAGING INFORMATION

Tape&Reel 800pcs per reel  
Weight 2.5g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

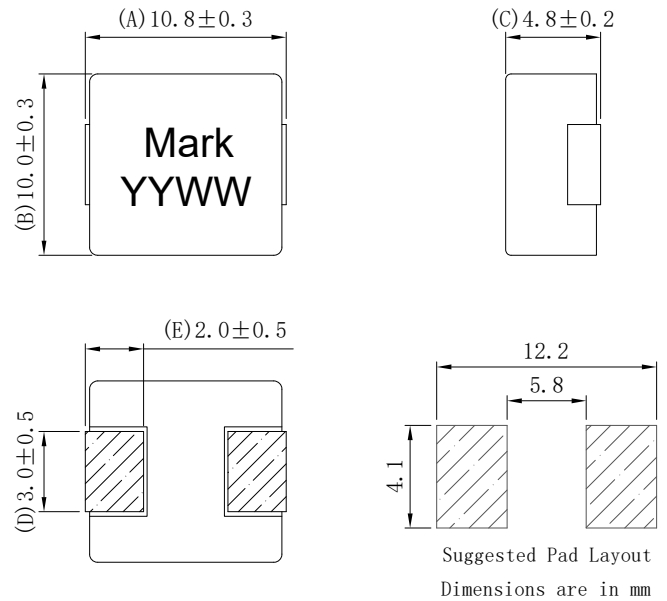
### FEATURES

- RoHS compliant
- Small size (11.1\*10.3mm Max),low profile(Height:5.0mm Max)
- Inductance range from 0.22uH to 33.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1050NSGR22M	0.22	0.67	0.80	37.0	60.0	R22M
MHA1050NSGR47M	0.47	1.10	1.30	30.0	45.0	R47M
MHA1050NSG1R0M	1.00	2.30	2.60	19.0	29.0	1R0M
MHA1050NSG1R2M	1.20	2.80	3.10	18.0	28.0	1R2M
MHA1050NSG1R5M	1.50	3.30	3.80	16.0	26.0	1R5M
MHA1050NSG2R2M	2.20	5.40	6.00	13.0	20.0	2R2M
MHA1050NSG3R3M	3.30	9.30	11.00	12.0	16.0	3R3M
MHA1050NSG4R7M	4.70	12.50	15.00	9.00	15.0	4R7M
MHA1050NSG6R8M	6.80	16.00	18.50	8.50	14.0	6R8M
MHA1050NSG100M	10.0	25.00	28.00	7.50	10.0	100M
MHA1050NSG150M	15.0	35.00	40.00	6.00	8.00	150M
MHA1050NSG220M	22.0	45.00	50.00	5.50	6.00	220M
MHA1050NSG330M	33.0	70.00	76.00	4.50	5.00	330M
MHA1050NSG470M	47.0	128.0	138.0	3.50	3.50	470M
MHA1050NSG680M	68.0	195.0	210.0	2.20	3.00	680M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	500pcs per reel
Weight	3.0g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

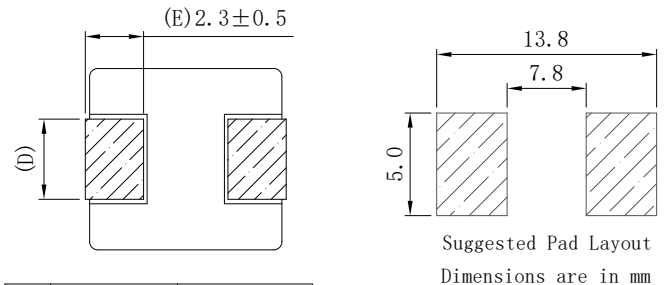
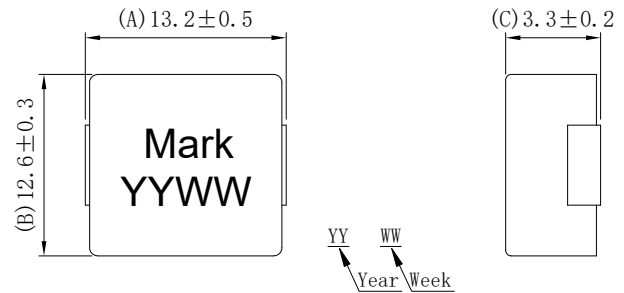
### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max),low profile(Height:3.5mm Max)
- Inductance range from 0.22uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR(m $\Omega$ )@25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1235NSGR22M	0.22	1.00	1.20	38.0	55.0	R22M
MHA1235NSGR56M	0.56	1.70	2.00	29.0	44.0	R56M
MHA1235NSGR68M	0.68	2.00	2.30	28.0	42.0	R68M
MHA1235NSGR82M	0.82	2.50	2.90	25.0	37.0	R82M
MHA1235NSG1R0M	1.00	3.00	3.40	24.0	34.0	1R0M
MHA1235NSG1R5M	1.50	4.10	4.70	18.0	26.0	1R5M
MHA1235NSG2R2M	2.20	6.00	6.90	14.0	20.0	2R2M
MHA1235NSG3R3M	3.30	8.30	9.50	13.0	16.0	3R3M
MHA1235NSG4R7M	4.70	15.00	17.00	9.00	15.0	4R7M
MHA1235NSG5R6M	5.60	18.30	19.00	8.00	14.0	5R6M
MHA1235NSG6R8M	6.80	19.80	22.00	7.00	13.0	6R8M
MHA1235NSG8R2M	8.20	24.80	28.00	6.50	12.0	8R2M
MHA1235NSG100M	10.0	26.00	29.00	6.00	10.0	100M



D	R22--1R0	1R5--100
		4.0 $\pm$ 0.5

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	500pcs per reel
Weight	3.4g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

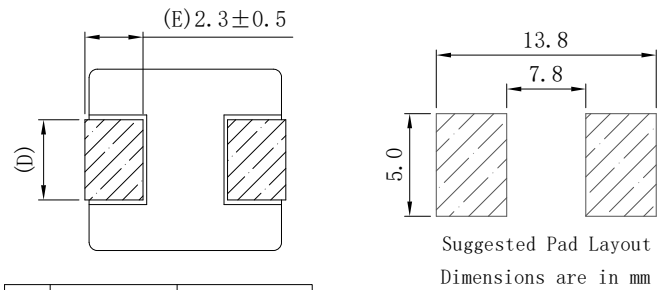
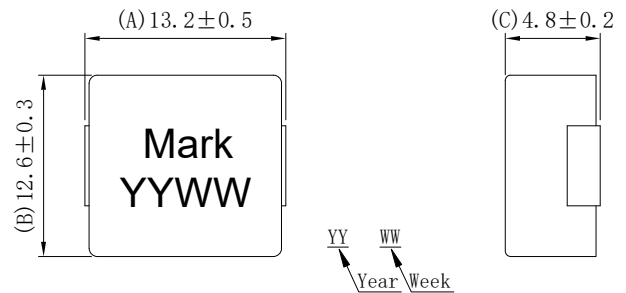
### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max), low profile (Height: 5.0mm Max)
- Inductance range from 0.22uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1250NSGR10M	0.10	0.33	0.59	43.0	80.0	R10M
MHA1250NSGR22M	0.22	0.60	0.80	51.0	75.0	R22M
MHA1250NSGR36M	0.33	0.77	1.10	41.0	60.0	R36M
MHA1250NSGR47M	0.47	1.00	1.30	35.0	47.4	R47M
MHA1250NSGR68M	0.68	1.34	1.55	32.5	46.0	R68M
MHA1250NSGR82M	0.82	1.50	1.67	30.0	39.0	R82M
MHA1250NSG1R0M	1.00	1.90	2.20	26.0	35.0	1R0M
MHA1250NSG1R5M	1.50	2.70	3.20	23.0	32.0	1R5M
MHA1250NSG2R2M	2.20	4.00	5.00	15.0	25.0	2R2M
MHA1250NSG3R3M	3.30	7.50	9.00	12.0	23.0	3R3M
MHA1250NSG4R7M	4.70	12.00	14.00	11.0	17.0	4R7M
MHA1250NSG5R6M	5.60	13.00	15.00	10.5	15.0	5R6M
MHA1250NSG6R8M	6.80	15.00	18.00	10.0	14.0	6R8M
MHA1250NSG8R2M	8.20	17.00	20.00	9.00	13.0	8R2M
MHA1250NSG100M	10.0	22.00	25.00	8.00	12.0	100M
MHA1250NSG150M	15.0	23.50	27.50	6.50	9.50	150M
MHA1250NSG220M	22.0	35.00	40.00	5.00	7.00	220M
MHA1250NSG330M	33.0	58.00	62.00	4.50	5.20	330M



D	R10--1R5	2R2--330
		4.0 $\pm$ 0.5

Suggested Pad Layout  
Dimensions are in mm

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	500pcs per reel
Weight	4.8g/pcs

### Notes

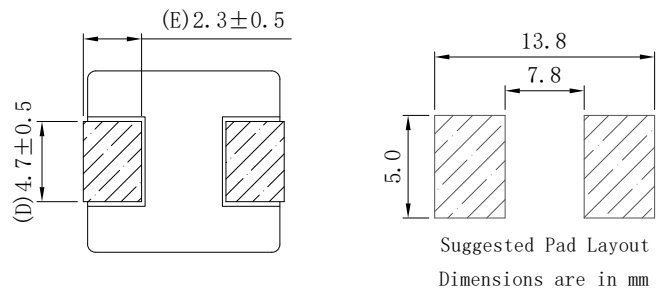
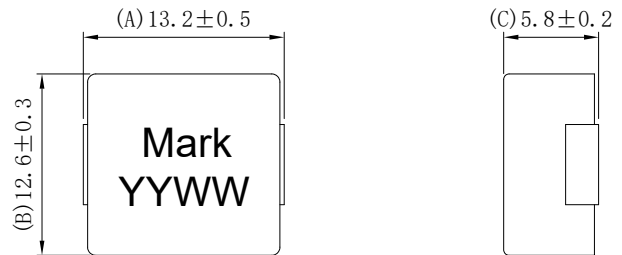
1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max),low profile(Height:6.0mm Max)
- Inductance range from 0.22uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications



Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR (m $\Omega$ ) @25 $^{\circ}$ C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1260NSG6R8M	6.80	10.00	13.80	11.5	15.0	6R8M
MHA1260NSG8R2M	8.20	13.60	16.00	11.0	13.5	8R2M
MHA1260NSG100M	10.0	18.00	20.70	10.0	12.5	100M
MHA1260NSG120M	12.0	20.00	23.00	7.00	10.0	120M
MHA1260NSG150M	15.0	25.00	29.00	6.00	9.00	150M
MHA1260NSG180M	18.0	30.00	35.00	5.00	8.00	180M
MHA1260NSG220M	22.0	34.00	39.50	5.00	7.50	220M
MHA1260NSG270M	27.0	49.00	56.00	4.00	6.50	270M
MHA1260NSG330M	33.0	65.00	75.00	4.00	6.00	330M
MHA1260NSG470M	47.0	80.00	90.00	3.50	5.50	470M
MHA1260NSG680M	68.0	115.0	130.0	3.25	4.50	680M
MHA1260NSG820M	82.0	120.0	140.0	3.00	4.00	820M
MHA1260NSG101M	100.0	180.0	200.0	2.50	3.50	101M
MHA1260NSG121M	120.0	210.0	235.0	2.30	3.20	121M
MHA1260NSG151M	150.0	300.0	350.0	2.00	2.70	151M

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Storage temperature rang	-55 $^{\circ}$ C to +125 $^{\circ}$ C

### SOLDERING INFORMATION

Peak reflow temperature	250 $^{\circ}$ C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	300pcs per reel
Weight	5.6g/pcs

### Notes

1. Electrical specification at 25 $^{\circ}$ C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40 $^{\circ}$ C temperature rise from 25 $^{\circ}$ C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125 $^{\circ}$ C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

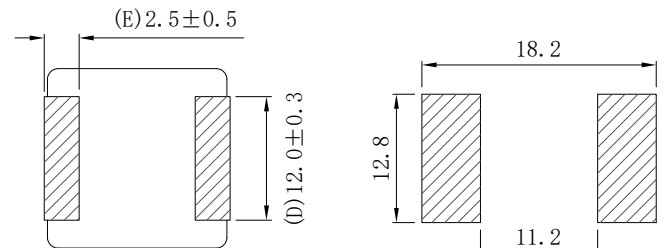
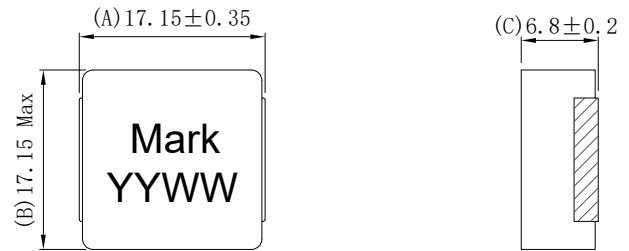
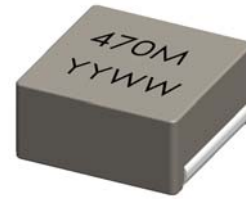
### FEATURES

- RoHS compliant, UL94V-0
- Small size (17.50\*17.15mm Max), low profile (Height: 7.0mm Max)
- Inductance range from 0.47uH to 100.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR (m $\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA1770NSGR47M	0.47	0.80	0.95	60.0	75.0	R47M
MHA1770NSG1R0M	1.00	1.20	1.45	49.5	54.0	1R0M
MHA1770NSG1R5M	1.50	1.85	2.15	40.0	40.0	1R5M
MHA1770NSG2R2M	2.20	2.15	2.50	32.0	34.0	2R2M
MHA1770NSG3R3M	3.30	3.40	3.95	26.0	26.0	3R3M
MHA1770NSG4R7M	4.70	4.12	4.72	24.0	24.0	4R7M
MHA1770NSG6R8M	6.80	6.55	7.55	19.0	22.0	6R8M
MHA1770NSG8R2M	8.20	8.10	8.70	15.0	20.0	8R2M
MHA1770NSG100M	10.0	9.30	10.00	13.0	18.0	100M
MHA1770NSG150M	15.0	14.50	15.00	11.0	13.0	150M
MHA1770NSG200M	20.0	19.50	21.90	8.9	12.0	200M
MHA1770NSG220M	22.0	20.50	23.00	8.7	11.0	220M
MHA1770NSG330M	33.0	35.10	37.00	8.00	10.0	330M
MHA1770NSG470M	47.0	41.00	47.00	5.50	7.50	470M
MHA1770NSG680M	68.0	74.00	85.00	4.70	6.50	680M
MHA1770NSG101M	100.0	110.0	130.0	3.30	5.00	101M



Suggested Pad Layout  
Dimensions are in mm

YY WW  
Year Week

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang  
(Including coil' self temperature rise)  
Storage temperature rang

-55°C to +125°C

-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature  
Pin finish

250°C  
tin

### PACKAGING INFORMATION

Tape & Reel  
Weight

300pcs per reel  
11.8g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



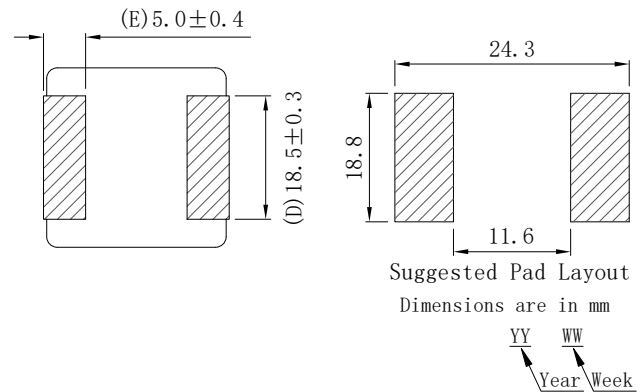
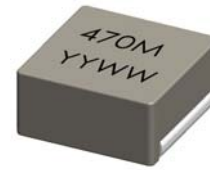
### FEATURES

- RoHS compliant, UL94V-0
- Small size (22.80\*22.30mm Max), low profile (Height: 13.0mm Max)
- Inductance range from 0.47uH to 100.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR (m $\Omega$ ) @25°C		Irms (A)	Isat (A)	Mark
		TYP.	MAX.			
MHA2213SGR47M	0.47	0.56	0.67	80.0	100.0	R47M
MHA2213SG1R0M	1.00	0.82	0.89	69.0	71.0	1R0M
MHA2213SG1R5M	1.50	1.00	1.15	50.0	50.0	1R5M
MHA2213SG2R2M	2.20	1.20	1.25	48.0	48.0	2R2M
MHA2213SG3R3M	3.30	1.63	1.77	41.0	41.0	3R3M
MHA2213SG4R7M	4.70	1.69	1.84	37.0	37.0	4R7M
MHA2213SG6R8M	6.80	2.84	3.09	36.0	36.0	6R8M
MHA2213SG100M	10.0	4.04	4.14	28.0	28.0	100M
MHA2213SG150M	15.0	5.62	6.11	23.5	24.0	150M
MHA2213SG220M	22.0	10.60	10.80	17.5	16.0	220M
MHA2213SG330M	33.0	15.10	15.40	15.5	10.5	330M
MHA2213SG470M	47.0	17.30	17.70	13.5	10.0	470M
MHA2213SG680M	68.0	26.20	29.50	12.0	9.5	680M
MHA2213SG750M	75.0	29.76	32.35	11.0	9.0	750M
MHA2213SG820M	82.0	31.46	34.20	10.2	9.0	820M
MHA2213SG101M	100.0	36.25	39.40	9.1	7.0	101M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape & Reel	50pcs per reel
Weight	37.5g/pcs

### Notes

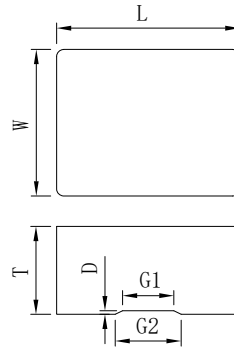
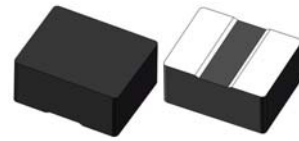
1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### FEATURES

- RoHS compliant
- Small size (2.7\*2.2\*1.2mm Max)
- Inductance range from 0.33uH to 2.2uH
- Low loss realized with low DCR
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D

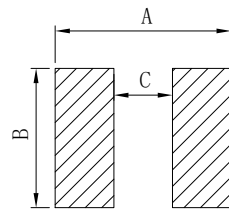
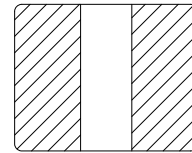
### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- Smartphone, wearable device, Notebook, Server, Networking/Telecom



Code	Dimensions
L	2.5±0.2
W	2.0±0.2
T	1.2 Max.
G1	0.7 Typ.
G2	0.9 Typ.
D	0.05±0.01

Unit:mm



Code	Dimensions
A	2.6
B	2.1
C	0.8

Unit:mm

Part number	L0 ( $\mu$ H±20%)	DCR (m $\Omega$ )		I <sub>rms</sub> (A)		I <sub>sat</sub> (A)	
		TYP	MAX	TYP	MAX	TYP	MAX
MHCT252012NSGR33M	0.33	16	22	5.4	4.7	8.3	7.6
MHCT252012NSGR47M	0.47	18	24	4.7	4	7.4	6.7
MHCT252012NSGR68M	0.68	33	36	4.1	3.5	6.3	5.4
MHCT252012NSG1R0M	1.0	38	42	3.8	3.3	5.4	4.2
MHCT252012NSG1R5M	1.5	48	56	2.7	2.3	4.7	3.9
MHCT252012NSG2R2M	2.2	74	84	2.6	2.2	4.2	3.5
MHCT252012NSG3R3M	3.3	125	135	2.3	1.8	3.8	3.0
MHCT252012NSG4R7M	4.7	170	200	1.5	1.0	2.7	2.1

### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	265°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
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### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 1 MHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 30% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.



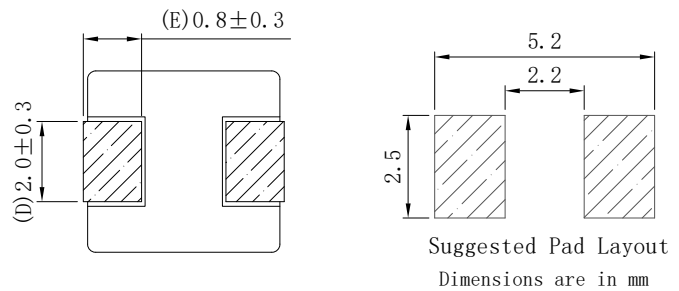
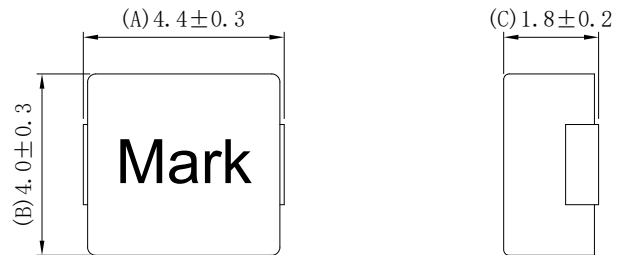
### FEATURES

- RoHS compliant
- Small size (4.7\*4.3mm Max),low profile(Height:2.0mm Max)
- Inductance range from 0.10uH to 2.2uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
MHC0420SGR10M	0.10	4.50	5.00	16.0	35.0	R10
MHC0420SGR22M	0.22	8.20	8.60	13.0	24.0	R22
MHC0420SGR47M	0.47	16.0	18.0	5.60	11.5	R47
MHC0420SG1R0M	1.0	33.0	37.0	3.75	8.5	1R0
MHC0420SG1R5M	1.5	43.3	46.3	5.10	6.1	1R5
MHC0420SG2R2M	2.2	80.0	90.0	2.85	6.0	2R2



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	3000pcs per reel
Weight	0.19g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

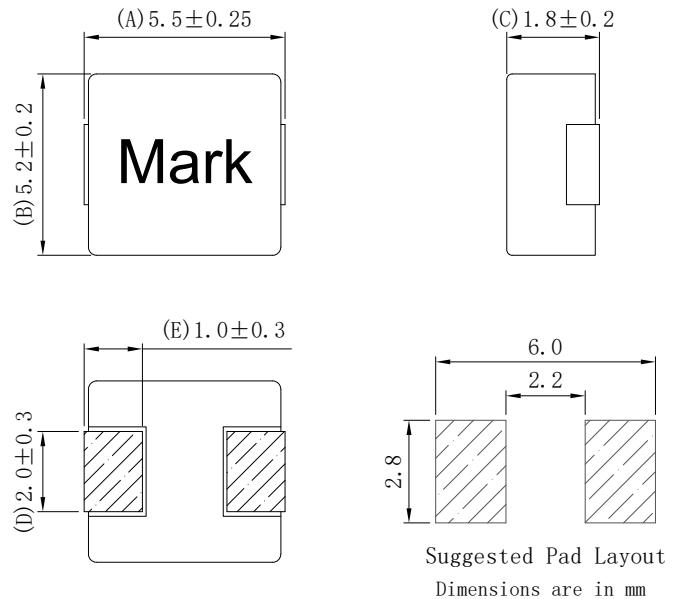
### FEATURES

- RoHS compliant, UL94V-0
- Small size (5.75\*5.4mm Max), low profile (Height: 2.0mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D
- 

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
MHC0520SGR10M	0.10	3.6	3.9	17.0	45.0	R10
MHC0520SGR22M	0.22	4.9	5.2	15.0	22.0	R22
MHC0520SGR33M	0.33	7.6	8.2	12.0	25.0	R33
MHC0520SGR47M	0.47	8.9	9.4	11.5	21.0	R47
MHC0520SGR68M	0.68	11.2	12.4	10.0	15.0	R68
MHC0520SG1R0M	1.0	18.9	20.0	7.0	16.0	1R0
MHC0520SG2R2M	2.2	45.6	50.1	4.2	9.5	2R2
MHC0520SG3R3M	3.3	79.2	85.5	3.3	8.5	3R3
MHC0520SG4R7M	4.7	108.0	116.6	2.8	5.0	4R7
MHC0520SG5R6M	5.6	113.0	122.0	2.5	4.5	5R6
MHC0520SG6R8M	6.8	139.0	150.0	2.4	4.3	6R8
MHC0520SG100M	10.0	184.0	199.0	2.3	4.0	100



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.29g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

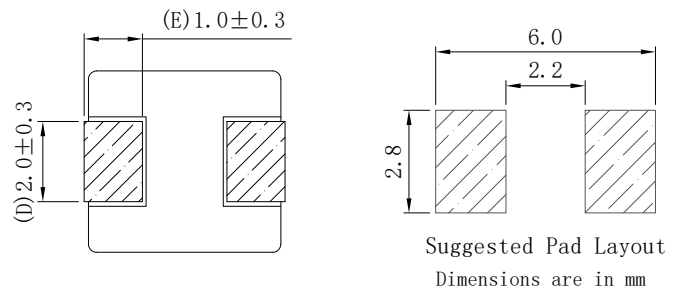
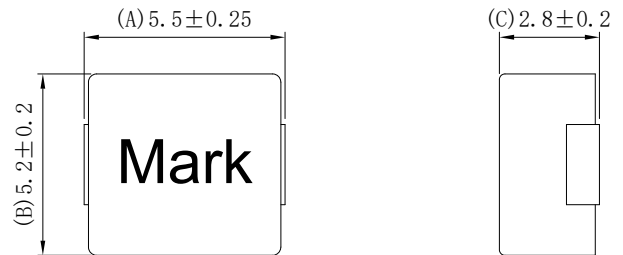
### FEATURES

- RoHS compliant,UL94V-0
- Small size (5.75\*5.4mm Max),low profile(Height:3.0mm Max)
- Inductance range from 0.10uH to 15.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Tape & reel packing
- Solder profile acc.J-STD-020D
- 

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
MHC0530SGR10M	0.10	3.00	3.16	23.0	27.0	R10
MHC0530SGR22M	0.22	4.30	4.52	15.5	21.0	R22
MHC0530SGR33M	0.33	5.30	5.56	13.7	19.0	R33
MHC0530SGR47M	0.47	6.70	7.04	12.2	16.0	R47
MHC0530SGR68M	0.68	8.53	8.96	10.2	13.5	R68
MHC0530SGR82M	0.82	11.3	11.9	9.3	13.0	R82
MHC0530SG1R0M	1.0	13.1	13.7	9.2	12.0	1R0
MHC0530SG1R5M	1.5	19.7	20.7	7.2	11.0	1R5
MHC0530SG2R2M	2.2	27.8	29.2	5.8	10.0	2R2
MHC0530SG3R3M	3.3	52.1	54.7	5.0	8.5	3R3
MHC0530SG4R7M	4.7	73.8	77.5	3.5	8.2	4R7
MHC0530SG5R6M	5.6	103.0	108.0	3.0	4.1	5R6
MHC0530SG100M	10.0	158.0	164.0	2.5	4.0	100
MHC0530SG150M	15.0	252.0	265.0	1.9	2.5	150



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	2000pcs per reel
Weight	0.44g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

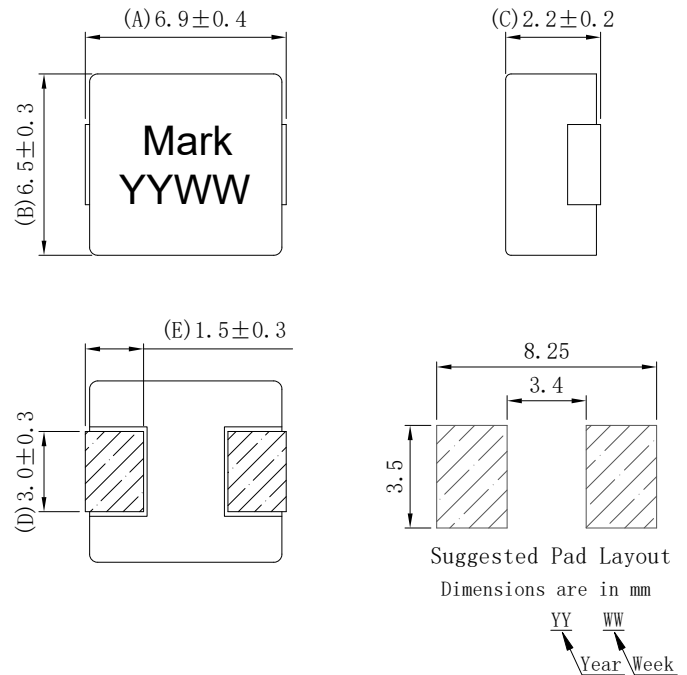
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:2.4mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	Irms (A)	Isat (A)	Mark
MHC0724SGR10M	0.10	1.5	1.7	30.0	50.0	R10M
MHC0724SGR22M	0.22	2.9	3.2	21.0	34.0	R22M
MHC0724SGR33M	0.33	3.7	4.1	18.0	22.0	R33M
MHC0724SGR47M	0.47	6.0	6.5	13.5	21.0	R47M
MHC0724SGR68M	0.68	8.7	9.4	11.0	18.0	R68M
MHC0724SGR82M	0.82	10.6	11.8	10.0	17.0	R82M
MHC0724SG1R0M	1.0	13.1	14.2	9.0	16.0	1R0M
MHC0724SG1R5M	1.5	18.5	21.2	7.5	15.0	1R5M
MHC0724SG2R2M	2.2	28.0	34.0	6.5	14.0	2R2M
MHC0724SG3R3M	3.3	36.5	51.6	5.0	13.0	3R3M
MHC0724SG4R7M	4.7	45.2	63.0	4.5	10.0	4R7M
MHC0724SG6R8M	6.8	72.5	95.0	3.5	9.0	6R8M
MHC0724SG8R2M	8.2	84.2	106.0	3.0	8.0	8R2M
MHC0724SG100M	10.0	115.6	129.0	2.5	7.0	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1500pcs per reel
Weight	0.62g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

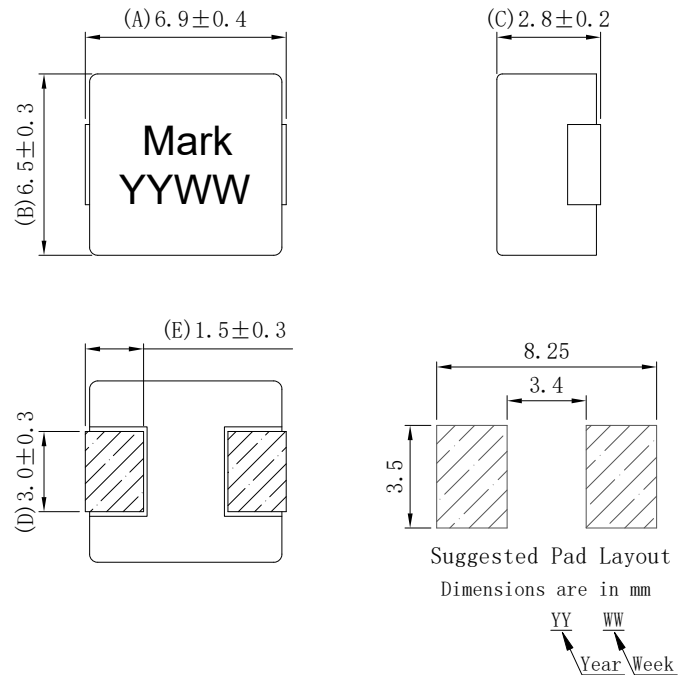
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max), low profile (Height: 3.0mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc. J-STD-020D

### APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	Irms (A)	Isat (A)	Mark
MHC0730SGR10M	0.10	1.5	1.7	32.5	60.0	R10M
MHC0730SGR15M	0.15	1.9	2.5	26.0	52.0	R15M
MHC0730SGR20M	0.20	2.4	2.8	26.0	41.0	R20M
MHC0730SGR22M	0.22	2.5	3.0	23.0	40.0	R22M
MHC0730SGR33M	0.33	3.5	3.9	20.0	30.0	R33M
MHC0730SGR47M	0.47	4.0	4.2	17.5	26.0	R47M
MHC0730SGR56M	0.56	4.7	5.0	16.5	25.5	R56M
MHC0730SGR68M	0.68	5.0	5.5	15.5	25.0	R68M
MHC0730SGR82M	0.82	6.7	8.0	13.0	24.0	R82M
MHC0730SG1R0M	1.0	9.0	10.0	11.0	22.0	1R0M
MHC0730SG1R5M	1.5	14.0	15.0	9.0	18.0	1R5M
MHC0730SG2R2M	2.2	18.0	20.0	8.0	14.0	2R2M
MHC0730SG3R3M	3.3	28.0	30.0	6.0	13.5	3R3M
MHC0730SG4R7M	4.7	37.0	40.0	5.5	10.0	4R7M
MHC0730SG5R6M	5.6	47.0	50.0	5.0	9.0	5R6M
MHC0730SG6R8M	6.8	54.0	60.0	4.5	8.0	6R8M
MHC0730SG8R2M	8.2	64.0	68.0	4.0	7.5	8R2M
MHC0730SG100M	10.0	102.0	105.0	3.0	7.0	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1500pcs per reel
Weight	0.8g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

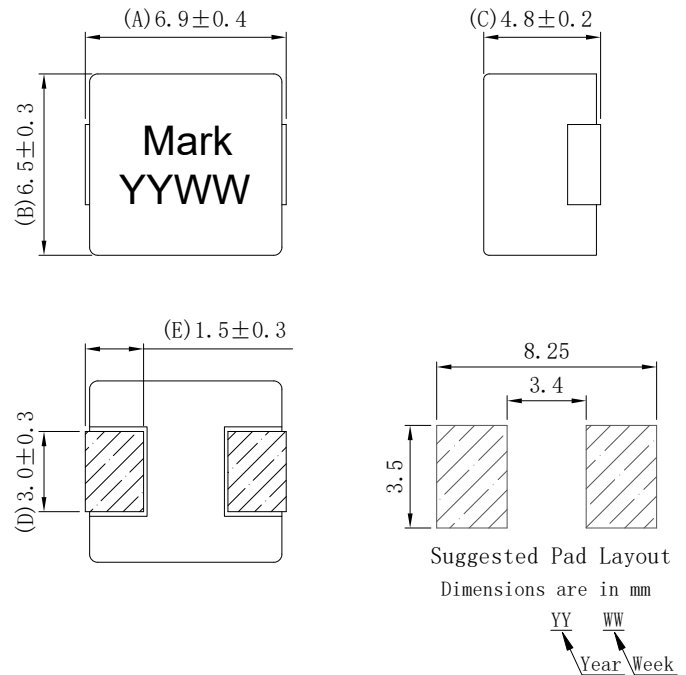
### FEATURES

- RoHS compliant
- Small size (7.3\*6.8mm Max),low profile(Height:5.0mm Max)
- Inductance range from 0.56uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu H \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	Irms (A)	Isat (A)	Mark
MHC0750SGR56M	0.56	3.4	3.6	20.0	27.0	R56M
MHC0750SGR68M	0.68	4.2	4.5	18.0	24.0	R68M
MHC0750SGR82M	0.82	4.6	4.9	16.5	20.0	R82M
MHC0750SG1R0M	1.0	5.6	6.5	13.0	15.0	1R0M
MHC0750SG1R5M	1.5	8.6	9.0	12.0	12.0	1R5M
MHC0750SG2R2M	2.2	13.0	13.6	10.0	10.0	2R2M
MHC0750SG3R3M	3.3	19.9	20.9	8.0	8.0	3R3M
MHC0750SG4R7M	4.7	28.9	30.3	6.5	7.0	4R7M
MHC0750SG5R6M	5.6	32.7	34.4	6.0	7.0	5R6M
MHC0750SG6R8M	6.8	42.5	44.6	5.5	5.5	6R8M
MHC0750SG8R2M	8.2	48.3	50.7	5.0	5.0	8R2M
MHC0750SG100M	10.0	67.9	71.3	4.5	4.5	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	1000pcs per reel
Weight	1.2g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.



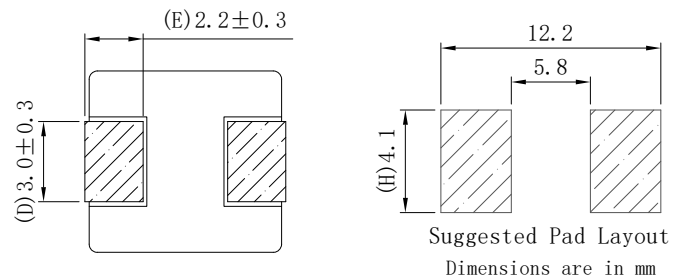
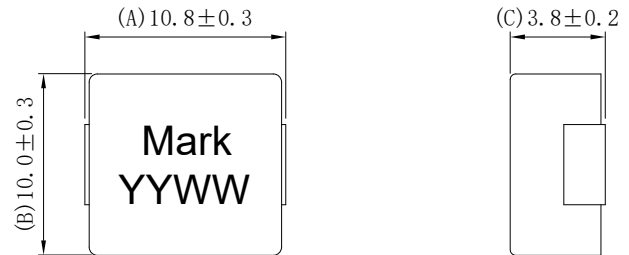
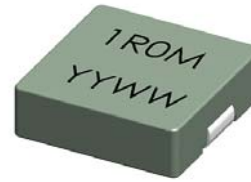
### FEATURES

- RoHS compliant
- Small size (11.1\*10.3mm Max),low profile(Height:4.0mm Max)
- Inductance range from 0.19uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu H \pm 20\%$ )	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Mark
MHC1040SGR19M	0.19	0.875	0.95	40.0	90.0	R19M
MHC1040SGR36M	0.36	1.3	1.4	31.5	60.0	R36M
MHC1040SGR47M	0.47	1.6	1.8	27.5	49.0	R47M
MHC1040SGR56M	0.56	1.7	1.8	27.5	49.0	R56M
MHC1040SGR68M	0.68	2.4	2.7	22.0	39.0	R68M
MHC1040SG1R0M	1.0	3.7	4.1	17.5	36.0	1R0M
MHC1040SG1R5M	1.5	5.3	5.8	15.0	27.5	1R5M
MHC1040SG2R2M	2.2	8.2	9.0	12.0	25.6	2R2M
MHC1040SG3R3M	3.3	13.7	14.4	10.0	18.6	3R3M
MHC1040SG4R7M	4.7	15.0	16.5	9.5	17.0	4R7M
MHC1040SG5R6M	5.6	17.6	19.3	8.5	16.0	5R6M
MHC1040SG6R8M	6.8	21.2	23.3	8.0	13.5	6R8M
MHC1040SG100M	10.0	33.2	36.5	6.8	12.0	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	800pcs per reel
Weight	2.5g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. I<sub>rms</sub> is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. I<sub>sat</sub> is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.

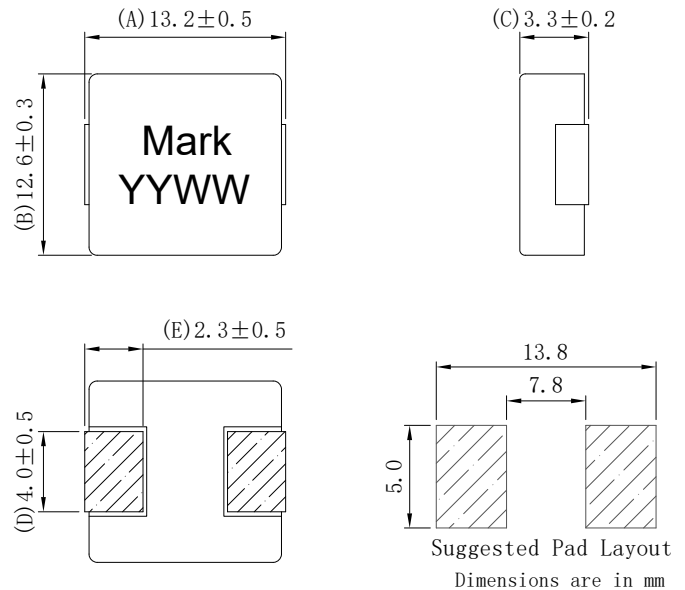
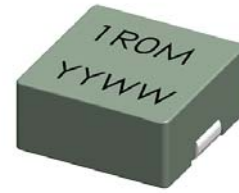
### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max),low profile(Height:3.5mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. ( $\text{m}\Omega$ )	DCR MAX. ( $\text{m}\Omega$ )	Irms (A)	Isat (A)	Mark
MHC1235SGR10M	0.10	0.80	0.96	43.0	84.0	R10M
MHC1235SGR15M	0.15	1.0	1.2	41.0	75.0	R15M
MHC1235SGR22M	0.22	1.1	1.3	38.5	65.0	R22M
MHC1235SGR33M	0.33	1.3	1.5	36.5	62.0	R33M
MHC1235SGR47M	0.47	1.6	2.0	32.0	55.0	R47M
MHC1235SGR60M	0.60	1.8	2.2	29.0	51.0	R60M
MHC1235SGR68M	0.68	2.3	2.5	28.0	49.0	R68M
MHC1235SGR82M	0.82	2.6	3.0	25.0	44.0	R82M
MHC1235SG1R0M	1.0	3.3	3.5	24.0	40.0	1R0M
MHC1235SG1R5M	1.5	5.1	5.5	19.0	35.0	1R5M
MHC1235SG1R8M	1.8	6.5	7.0	16.5	30.0	1R8M
MHC1235SG2R2M	2.2	7.2	8.0	16.0	29.0	2R2M
MHC1235SG3R3M	3.3	11.0	12.0	12.0	27.0	3R3M
MHC1235SG4R7M	4.7	14.3	15.0	10.0	24.0	4R7M
MHC1235SG5R6M	5.6	18.3	19.0	9.5	19.0	5R6M
MHC1235SG6R8M	6.8	19.8	22.0	9.0	18.0	6R8M
MHC1235SG8R2M	8.2	24.8	28.0	8.5	16.0	8R2M
MHC1235SG100M	10.0	30.4	34.0	7.0	14.0	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	500pcs per reel
Weight	3.4g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end appliction.



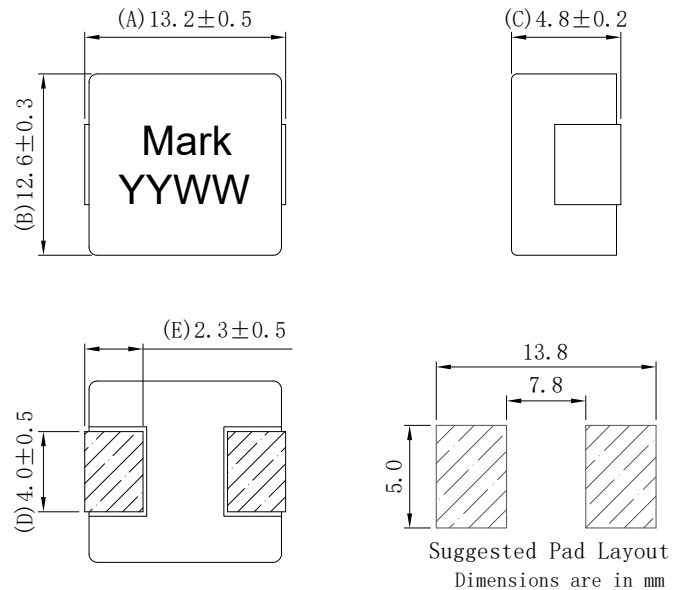
### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max),low profile(Height:5.0mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu\text{H} \pm 20\%$ )	DCR TYP. ( $\text{m}\Omega$ )	DCR MAX. ( $\text{m}\Omega$ )	Irms (A)	Isat (A)	Mark
MHC1250SGR10M	0.10	0.53	0.60	55.0	118.0	R10M
MHC1250SGR22M	0.22	0.64	0.80	51.0	110.0	R22M
MHC1250SGR33M	0.33	0.85	1.1	42.0	80.0	R33M
MHC1250SGR47M	0.47	1.1	1.3	38.0	65.0	R47M
MHC1250SGR56M	0.56	1.3	1.5	36.0	55.0	R56M
MHC1250SGR68M	0.68	1.5	1.7	34.0	54.0	R68M
MHC1250SGR82M	0.82	2.0	2.3	31.0	53.0	R82M
MHC1250SG1R0M	1.0	2.1	2.5	29.0	50.0	1R0M
MHC1250SG1R5M	1.5	3.4	4.1	23.0	48.0	1R5M
MHC1250SG1R8M	1.8	4.2	4.9	19.0	40.0	1R8M
MHC1250SG2R2M	2.2	4.6	5.5	20.0	32.0	2R2M
MHC1250SG3R3M	3.3	7.7	9.2	15.0	32.0	3R3M
MHC1250SG4R7M	4.7	12.8	15.0	12.0	27.0	4R7M
MHC1250SG5R6M	5.6	14.0	16.5	11.5	22.0	5R6M
MHC1250SG6R8M	6.8	15.4	18.5	11.0	21.0	6R8M
MHC1250SG7R8M	7.8	17.2	20.5	10.0	18.0	7R8M
MHC1250SG8R2M	8.2	18.9	22.5	9.5	18.0	8R2M
MHC1250SG100M	10.0	21.4	25.5	9.0	16.0	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang (Including coil' self temperature rise)	-55°C to +125°C
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	500pcs per reel
Weight	4.8g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end appliction.

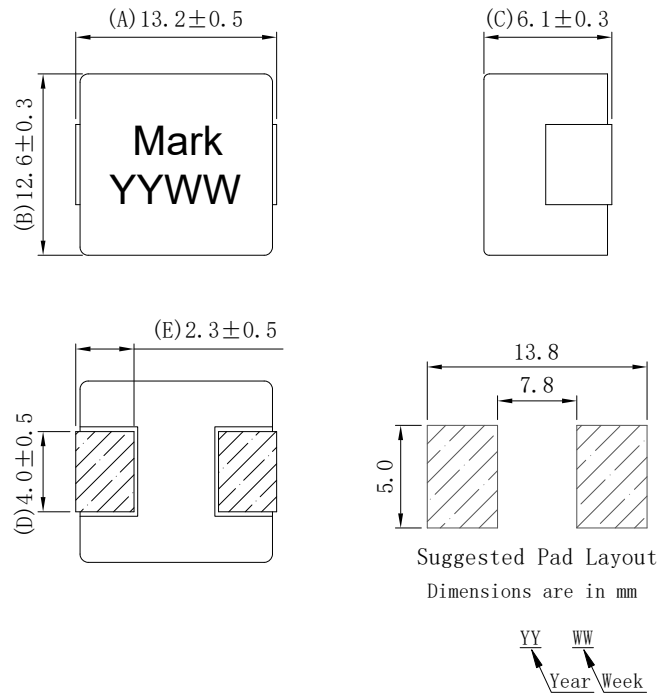
### FEATURES

- RoHS compliant
- Small size (13.7\*12.9mm Max),low profile(Height:6.4mm Max)
- Inductance range from 0.10uH to 10.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- UL94V-0
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

- Low profile ,high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications

Part number	Inductance ( $\mu$ H $\pm$ 20%)	DCR TYP. (m $\Omega$ )	DCR MAX. (m $\Omega$ )	Irms (A)	Isat (A)	Mark
MHC1264SGR10M	0.10	0.47	0.50	60.0	120.0	R10M
MHC1264SGR15M	0.15	0.53	0.60	55.0	118.0	R15M
MHC1264SGR22M	0.22	0.63	0.70	53.0	112.0	R22M
MHC1264SGR30M	0.30	0.70	0.80	48.0	72.0	R30M
MHC1264SGR33M	0.33	0.83	0.90	46.0	65.0	R33M
MHC1264SGR40M	0.40	0.90	1.0	44.0	64.0	R40M
MHC1264SGR47M	0.47	1.0	1.2	41.0	63.0	R47M
MHC1264SGR56M	0.56	1.2	1.4	37.0	62.0	R56M
MHC1264SGR68M	0.68	1.4	1.6	35.0	60.0	R68M
MHC1264SGR82M	0.82	1.6	1.9	33.0	50.0	R82M
MHC1264SG1R0M	1.0	1.7	2.0	32.0	49.0	1R0M
MHC1264SG1R2M	1.2	2.1	2.5	30.0	48.0	1R2M
MHC1264SG1R5M	1.5	2.5	3.0	27.0	45.0	1R5M
MHC1264SG1R8M	1.8	2.8	3.2	24.0	41.0	1R8M
MHC1264SG2R2M	2.2	3.5	4.2	22.0	40.0	2R2M
MHC1264SG3R3M	3.3	5.7	6.8	18.0	35.0	3R3M
MHC1264SG4R7M	4.7	8.0	8.7	13.5	32.0	4R7M
MHC1264SG5R6M	5.6	9.3	10.0	12.5	30.0	5R6M
MHC1264SG6R8M	6.8	13.1	14.0	11.5	16.5	6R8M
MHC1264SG8R2M	8.2	14.5	15.5	10.5	16.0	8R2M
MHC1264SG100M	10.0	16.4	17.2	10.0	15.5	100M



### ABSOLUTE MAXIMUM RATINGS

Operating temperature rang	-55°C to +125°C
(Including coil' self temperature rise)	
Storage temperature rang	-55°C to +125°C

### SOLDERING INFORMATION

Peak reflow temperature	250°C
Pin finish	tin

### PACKAGING INFORMATION

Tape&Reel	300pcs per reel
Weight	6.0g/pcs

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature(ambient + temp.rise) should not exceed 125°C under worst case operating conditions.Circuit design,component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end appliction.

Thank you !

**Dongguan Mentech Optical & Magnetic Co., Ltd.**



(0086)-769-86921000



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

