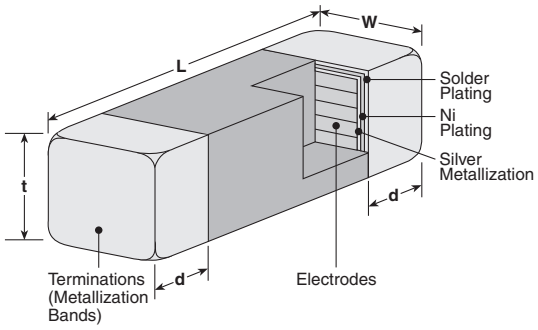
EU RoHS COMPLIANT



features

- Monolithic structure for closed magnetic path eliminates crosstalk and provides high reliability in a wide temperature and humidity range
- Standard EIA packages: 1J, 2A, 2B
- Nickel barrier with solder overcoat for excellent solderability
- Magnetically shielded
- Marking: Black body color with no marking
- Products with lead-free terminations meet EU RoHS requirements

dimensions and construction



Size Code	Dimensions inches (mm)			
	L	W	t	d
1J (0603)	.063±.006 (1.6±0.15)	.031±.006 (0.8±0.15)	.031±.006 (0.8±0.15)	.014±.006 (0.36±0.15)
2A (0805)	.079±.008 (2.0±0.2)	.049±.008 (1.25±0.2)	.035±.008 (0.9±0.2)	.02±.01 (0.51±0.25)
2B (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.043±.008 (1.1±0.2)	.02±.01 (0.51±0.25)

ordering information

New Part #

MCL	1J	H	T	TE	R10	K
Type	Size Code	Material	Termination Material	Packaging	Nominal Inductance	Tolerance
	1J 2A 2B	Permeability Code: H J	T: Sn	TD: 7" paper tape (1J - 4,000 pieces/reel 2A - 0.047µH ~ 2.2µH = 4,000 pieces/reel) TE: 7" embossed plastic (2A - 2.7µH ~ 10µH = 3,000 pieces/reel 2B - 3,000 pieces/reel)	047 = 0.047µH R10 = 0.100µH	K: ±10% M: ±20%

applications and ratings

Part Designation	Inductance L (µH)	Minimum Q	L.Q. Test Frequency (MHz)	Self Resonant Frequency Typical (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Operating Temperature Range
MCL1JHTTD047M	0.047	10	50	260	0.30	50	-55°C to +125°C
MCL1JHTTD068M	0.068			250			
MCL1JHTTD082M	0.082			245			
MCL1JHTTDR10*	0.10	15	25	240	0.50		
MCL1JHTTDR12*	0.12			205			
MCL1JHTTDR15*	0.15			180	0.60		
MCL1JHTTDR18*	0.18			165			
MCL1JHTTDR22*	0.22			150	0.80		
MCL1JHTTDR27*	0.27			136			

* Add tolerance character (K, M) - Other tolerances available upon request

For further information on packaging, please refer to Appendix A.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

2/24/08

applications and ratings

Part Designation	Inductance L (µH)	Minimum Q	L.Q. Test Frequency (MHz)	Self Resonant Frequency Typical (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Operating Temperature Range
MCL1JHTTDR33*	0.33	15	25	125	0.85	35	-55°C to +125°C
MCL1JHTTDR39*	0.39			110	1.00		
MCL1JHTTDR47*	0.47			105	1.35		
MCL1JHTTDR56*	0.56			95	1.55		
MCL1JHTTDR68*	0.68			90	1.70		
MCL1JHTTDR82*	0.82			85	2.10		
MCL1JJTTD1R0*	1.0	35	10	75	0.60	25	
MCL1JJTTD1R2*	1.2			65	0.80		
MCL1JJTTD1R5*	1.5			60			
MCL1JJTTD1R8*	1.8			55	0.95		
MCL1JJTTD2R2*	2.2			50	1.15	15	
MCL1JJTTD2R7*	2.7			45	1.35		
MCL1JJTTD3R3*	3.3			40	1.55		
MCL1JJTTD3R9*	3.9			35	1.70		
MCL1JJTTD4R7*	4.7			33	2.10		
MCL2AHTTD047M	0.047	15	50	320	0.20	300	-55°C to +125°C
MCL2AHTTD068M	0.068			280			
MCL2AHTTD082M	0.082			255			
MCL2AHTTDR10*	0.10	20	25	235	0.30	250	
MCL2AHTTDR12*	0.12			220			
MCL2AHTTDR15*	0.15			200	0.40		
MCL2AHTTDR18*	0.18			185			
MCL2AHTTDR22*	0.22			170	0.50		
MCL2AHTTDR27*	0.27			150			
MCL2AHTTDR33*	0.33			145	0.55		
MCL2AHTTDR39*	0.39	25		135	0.65	200	
MCL2AHTTDR47*	0.47			125			
MCL2AHTTDR56*	0.56			115	0.75	150	
MCL2AHTTDR68*	0.68			105	0.80		
MCL2AHTTDR82*	0.82			100	1.00		
MCL2AJTTD1R0*	1.0	45	10	75	0.40	50	
MCL2AJTTD1R2*	1.2			65	0.50		
MCL2AJTTD1R5*	1.5			60			
MCL2AJTTD1R8*	1.8			55	0.60		
MCL2AJTTD2R2*	2.2			50	0.65	30	
MCL2AJTTE2R7*	2.7			45	0.75		
MCL2AJTTE3R3*	3.3			41	0.80		
MCL2AJTTE3R9*	3.9			38	0.90		
MCL2AJTTE4R7*	4.7			35	1.00		

* Add tolerance character (K, M) - Other tolerances available upon request

For complete environmental specifications, please refer to pages 208-209.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use. 3/06/07

applications and ratings (continued)

Part Designation	Inductance L (µH)	Minimum Q	L.Q. Test Frequency (MHz)	Self Resonant Frequency Typical (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Operating Temperature Range
MCL2AJTTE5R6*	5.6	50	4	32	0.90	15	-55°C to +125°C
MCL2AJTTE6R8*	6.8			29	1.00		
MCL2AJTTE8R2*	8.2			26	1.10		
MCL2AJTTE100*	10		2	24	1.15		
MCL2BHTTE047M	0.047	20	50	320	0.15	300	-55°C to +125°C
MCL2BHTTE068M	0.068			280	0.25		
MCL2BHTTER10*	0.10		25	235		250	
MCL2BHTTER12*	0.12			220	0.30		
MCL2BHTTER15*	0.15			200			
MCL2BHTTER18*	0.18			185	0.40		
MCL2BHTTER22*	0.22			170			
MCL2BHTTER27*	0.27			150	0.50		
MCL2BHTTER33*	0.33			145	0.60		
MCL2BHTTER39*	0.39	25		135	0.50	200	
MCL2BHTTER47*	0.47			125	0.60		
MCL2BHTTER56*	0.56			115	0.70	150	
MCL2BHTTER68*	0.68			105	0.80		
MCL2BHTTER82*	0.82			100	0.90		
MCL2BJTTE1R0*	1.0	45	10	75	0.40	100	
MCL2BJTTE1R2*	1.2			65	0.50		
MCL2BJTTE1R5*	1.5			60		50	
MCL2BJTTE1R8*	1.8			55			
MCL2BJTTE2R2*	2.2			50	0.60		
MCL2BJTTE2R7*	2.7			45			
MCL2BJTTE3R3*	3.3			41	0.70		
MCL2BJTTE3R9*	3.9			38	0.80		
MCL2BJTTE4R7*	4.7			35	0.85		
MCL2BJTTE5R6*	5.6	50	4	32	0.90	25	
MCL2BJTTE6R8*	6.8			29			
MCL2BJTTE8R2*	8.2			26			
MCL2BJTTE100*	10		2	24	1.00		
MCL2BJTTE120*	12			22	1.05	15	
MCL2BJTTE150*	15	30	1	19	0.70	5	
MCL2BJTTE220*	22			16	0.90		
MCL2BJTTE330*	33		0.4	13	1.05		

* Add tolerance character (K, M) - Other tolerances available upon request

For complete environmental specifications, please refer to pages 208-209.