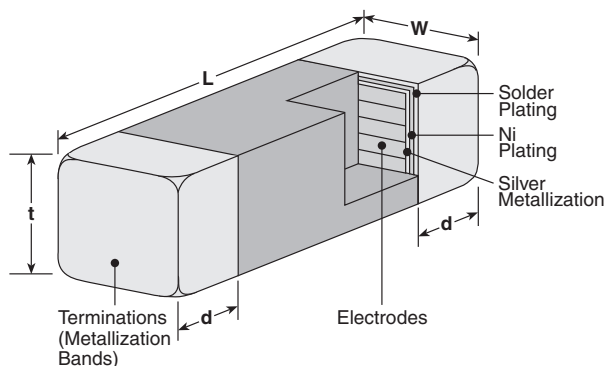




features

- 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

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	J
	Type	Size Code	Material	Termination Material	Packaging	Nominal Inductance	Tolerance
		1J 2A 2B	Permeability Code: H J	T: Sn L: SnPb	TE: 7" embossed plastic (0603 - 4,000 pieces/reel) (0805 - 2,000/4,000 pieces/reel) 2.7µH - 12µH = 2,000 0.047µH - 2.2µH = 4,000 (1206 - 3,000 pieces/reel)	047 = 0.047µH R10 = 0.100µH	J: ±5% K: ±10%

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
MCL1JH*TE047**	0.047	10	50	260	0.30	50	-55°C to +125°C
MCL1JH*TE068**	0.068			250			
MCL1JH*TE082**	0.082			245			
MCL1JH*TER10**	0.10	15	25	240	0.50		
MCL1JH*TER12**	0.12			205			
MCL1JH*TER15**	0.15			180	0.60		
MCL1JH*TER18**	0.18			165			
MCL1JH*TER22**	0.22			150			
MCL1JH*TER27**	0.27						

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.

3/30/05

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
MCL1JH*TER33**	0.33	15	25	125	0.85	35	-55°C to +125°C
MCL1JH*TER39**	0.39			110	1.00		
MCL1JH*TER47**	0.47			105	1.35		
MCL1JH*TER56**	0.56			95	1.55		
MCL1JH*TER68**	0.68			90	1.70		
MCL1JH*TER82**	0.82			85	2.10		
MCL1JJ*TE1R0**	1.0	35	10	75	0.60	25	
MCL1JJ*TE1R2**	1.2			65	0.80		
MCL1JJ*TE1R5**	1.5			60	0.80		
MCL1JJ*TE1R8**	1.8			55	0.95		
MCL1JJ*TE2R2**	2.2			50	1.15		
MCL1JJ*TE2R7**	2.7			45	1.35		
MCL1JJ*TE3R3**	3.3	30	4	40	1.55	15	
MCL1JJ*TE3R9**	3.9			35	1.70		
MCL1JJ*TE4R7**	4.7			33	2.10		
MCL1JJ*TE5R6**	5.6			22	1.55		
MCL1JJ*TE6R8**	6.8			20	1.70		
MCL1JJ*TE8R2**	8.2			18	2.10		
MCL1JJ*TE100**	10	2	2	17	1.85	3	
MCL1JJ*TE120**	12			15	2.10		
MCL2AH*TE047**	0.047	15	50	320	0.20	300	
MCL2AH*TE068**	0.068			280			
MCL2AH*TE082**	0.082			255			
MCL2AH*TER10**	0.10	20	25	235	0.30	250	
MCL2AH*TER12**	0.12			220	0.30		
MCL2AH*TER15**	0.15			200	0.40		
MCL2AH*TER18**	0.18			185	0.40		
MCL2AH*TER22**	0.22			170	0.50		
MCL2AH*TER27**	0.27			150	0.50		
MCL2AH*TER33**	0.33	25	25	145	0.55	200	
MCL2AH*TER39**	0.39			135	0.65		
MCL2AH*TER47**	0.47			125	0.65		
MCL2AH*TER56**	0.56			115	0.75		
MCL2AH*TER68**	0.68			105	0.80		
MCL2AH*TER82**	0.82			100	1.00		
MCL2AJ*TE1R0**	1.0	45	10	75	0.40	50	
MCL2AJ*TE1R2**	1.2			65	0.50		
MCL2AJ*TE1R5**	1.5			60	0.50		
MCL2AJ*TE1R8**	1.8			55	0.60		
MCL2AJ*TE2R2**	2.2			50	0.65		
MCL2AJ*TE2R7**	2.7			45	0.75		
MCL2AJ*TE3R3**	3.3	30	10	41	0.80		
MCL2AJ*TE3R9**	3.9			38	0.90		
MCL2AJ*TE4R7**	4.7			35	1.00		

* Add termination material character (T, L)

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

For complete environmental specifications, please refer to pages 162-163.

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
MCL2AJ*TE5R6**	5.6	50	4	32	0.90	15	-55°C to +125°C
MCL2AJ*TE6R8**	6.8			29	1.00		
MCL2AJ*TE8R2**	8.2			26	1.10		
MCL2AJ*TE100**	10		2	24	1.15		
MCL2AJ*TE120**	12			22	1.25		
MCL2AJ*TE150**	15	30	1	19	0.80	5	
MCL2AJ*TE180**	18			18	0.90		
MCL2AJ*TE220**	22			16	1.10		
MCL2AJ*TE270**	27			14	1.15		
MCL2AJ*TE330**	33		0.4	13	1.25		
MCL2BH*TE047**	0.047	20	50	320	0.15	300	-55°C to +125°C
MCL2BH*TE068**	0.068			280	0.25		
MCL2BH*TER10**	0.10			25	235		
MCL2BH*TER12**	0.12		220				
MCL2BH*TER15**	0.15		200		0.40		
MCL2BH*TER18**	0.18		185				
MCL2BH*TER22**	0.22		170				
MCL2BH*TER27**	0.27		150		0.50		
MCL2BH*TER33**	0.33		145		0.60		
MCL2BH*TER39**	0.39		25	135	0.50	200	
MCL2BH*TER47**	0.47	125		0.60			
MCL2BH*TER56**	0.56	115		0.70	150		
MCL2BH*TER68**	0.68	105		0.80			
MCL2BH*TER82**	0.82	100		0.90			
MCL2BJ*TE1R0**	1.0	45	10	75	0.40	100	
MCL2BJ*TE1R2**	1.2			65	0.50		
MCL2BJ*TE1R5**	1.5						
MCL2BJ*TE1R8**	1.8			55		0.60	
MCL2BJ*TE2R2**	2.2			50			
MCL2BJ*TE2R7**	2.7			45			
MCL2BJ*TE3R3**	3.3			41	0.70		
MCL2BJ*TE3R9**	3.9			38	0.80		
MCL2BJ*TE4R7**	4.7			35	0.85		
MCL2BJ*TE5R6**	5.6			50	4	32	0.90
MCL2BJ*TE6R8**	6.8	29					
MCL2BJ*TE8R2**	8.2	26					
MCL2BJ*TE100**	10	45	2	24	1.00	15	
MCL2BJ*TE120**	12			22	1.05		
MCL2BJ*TE150**	15	35	1	19	0.70	5	
MCL2BJ*TE180**	18			18			
MCL2BJ*TE220**	22	30		16	0.90		
MCL2BJ*TE270**	27		14				
MCL2BJ*TE330**	33		0.4	13	1.05		

* Add termination material character (T, L)

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

For complete environmental specifications, please refer to pages 162-163.