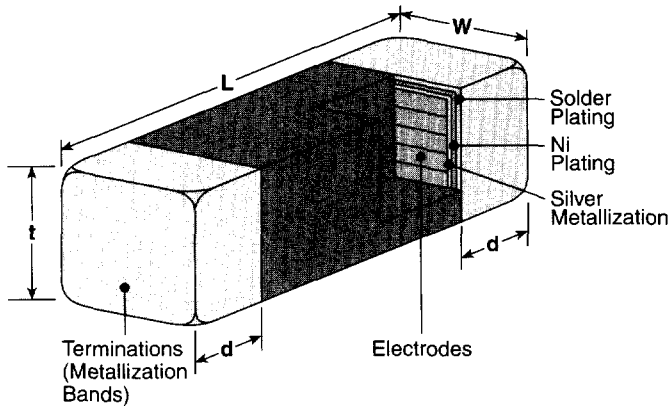


features

- 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

Inductors

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

Old Part #	MCI	0603	H		TE	R10	J
New Part #	MCL	1J	H	L	TE	R10	J
	Type	Size Code	Material	Termination Material	Packaging	Nominal Inductance	Tolerance
		1J 2A 2B	Permeability Code: H J	L: SnPb T: Sn	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% M: ±20%

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.

applications and ratings

Part Designation	Inductance L (µH)	Minimum Q	L.O. 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	-25°C to +85°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	0.80				
MCL1JH*TER27**	0.27			136					
MCL1JH*TER33**	0.33			125	0.85				
MCL1JH*TER39**	0.39			110	1.00				
MCL1JH*TER47**	0.47	35	10	105	1.35	15			
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	4		75	0.60	5
MCL1JJ*TE1R2**	1.2						65	0.80	
MCL1JJ*TE1R5**	1.5						60		
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	40	1.55						
MCL1JJ*TE3R9**	3.9	35	1.70						
MCL1JJ*TE4R7**	4.7	33	2.10						
MCL1JJ*TE5R6**	5.6	30	2			22	1.55	3	
MCL1JJ*TE6R8**	6.8			20	1.70				
MCL1JJ*TE8R2**	8.2			18	2.10				
MCL1JJ*TE10R**	10	30	2	17	1.85	3			
MCL1JJ*TE12R**	12			15	2.10				
MCL2AH*TE047**	0.047	15	50	320	0.20	300	-25°C to +85°C		
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					
MCL2AH*TER15**	0.15			200	0.40				
MCL2AH*TER18**	0.18			185					
MCL2AH*TER22**	0.22			170	0.50				
MCL2AH*TER27**	0.27			150					
MCL2AH*TER33**	0.33			145	0.55				
MCL2AH*TER39**	0.39			135	0.65				
MCL2AH*TER47**	0.47	25	25	125	0.75	200			
MCL2AH*TER56**	0.56			115	0.80				
MCL2AH*TER68**	0.68			105	0.80				
MCL2AH*TER82**	0.82			100	1.00				

Inductors

* Add termination material character (L, T)
 ** Add tolerance character (J, K, M) - Other tolerances available upon request.

For complete environmental specifications, please refer to pages 108-109.

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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*TE1R0**	1.0	45	10	75	0.40	50	-25°C to +85°C		
MCL2AJ*TE1R2**	1.2			65	0.50				
MCL2AJ*TE1R5**	1.5			60					
MCL2AJ*TE1R8**	1.8			55	0.60				
MCL2AJ*TE2R2**	2.2			50	0.65	30			
MCL2AJ*TE2R7**	2.7			45	0.75				
MCL2AJ*TE3R3**	3.3			41	0.80				
MCL2AJ*TE3R9**	3.9			38	0.90				
MCL2AJ*TE4R7**	4.7			35	1.00	15			
MCL2AJ*TE5R6**	5.6			50	4			32	0.90
MCL2AJ*TE6R8**	6.8	29	1.00						
MCL2AJ*TE8R2**	8.2	26	1.10						
MCL2AJ*TE10R**	10	2	24			1.15			
MCL2AJ*TE12R**	12		22			1.25			
MCL2BH*TE047**	0.047	20	50			320		0.15	300
MCL2BH*TE068**	0.068					280		0.25	
MCL2BH*TER10**	0.10					235			
MCL2BH*TER12**	0.12					220		0.30	
MCL2BH*TER15**	0.15					200			
MCL2BH*TER18**	0.18			185	0.40	250			
MCL2BH*TER22**	0.22			170					
MCL2BH*TER27**	0.27			150	0.50				
MCL2BH*TER33**	0.33			25	145		0.60		
MCL2BH*TER39**	0.39				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				60				
MCL2BJ*TE1R8**	1.8				55	0.60			
MCL2BJ*TE2R2**	2.2			50	0.70	50			
MCL2BJ*TE2R7**	2.7			45	0.80				
MCL2BJ*TE3R3**	3.3			41	0.85				
MCL2BJ*TE3R9**	3.9			38	0.90				
MCL2BJ*TE4R7**	4.7			35	0.90	25			
MCL2BJ*TE5R6**	5.6			35	4		32	0.90	
MCL2BJ*TE6R8**	6.8	29	1.00						
MCL2BJ*TE8R2**	8.2	26	1.05						
MCL2BJ*TE10R**	10	2	24			1.00			
MCL2BJ*TE12R**	12		22			1.05			
MCL2BJ*TE15R**	15	19	0.70			5			
MCL2BJ*TE18R**	18	1	18						

* Add termination material character (L, T)

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

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