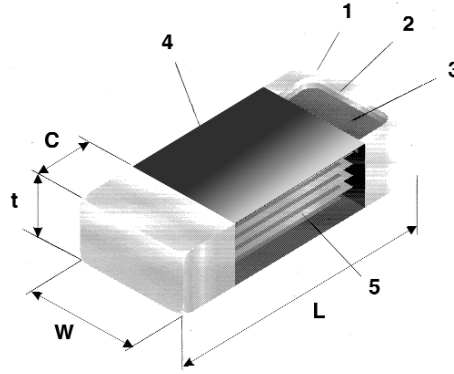


**MULTILAYER
FERRITE INDUCTORS
MCL (MCI)**



STRUCTURE

- 1 Solder plating
- 2 Diffusion barrier
- 3 Silver metallisation
- 4 Ferrite
- 5 Electrodes

IDENTIFICATION

TYPE	BODY COLOR	MARKING
MCL	Black	None

Products with Pb-free terminations meet RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

Old Part No.	MCI	0805	H		K	TE	821	
New Part No. (Pb-free)	MCL	2A	H	T		TE	821	K
	PRODUCT CODE	SIZE	PERMEABILITY CODE	TERMINATION SURFACE MATERIAL	INDUCTANCE TOLERANCE	TAPING*	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE
		1J = 0603 2A = 0805 2B = 1206	H, J	T: Sn L: Sn/Pb		TE: 7" embossed plastic *Please see "PACKAGING"	3 digits	K(±10%), M(±20%)

FEATURES

- Monolithic structure for closed magnetic path eliminates crosstalk and provides high reliability in wide temperature and humidity range
- Anti-leaching nickel barrier terminations
- Magnetically shielded
- 90/10 solder plated terminations
- Wide range of electrical properties
- Suitable for prevention of electromagnetic interference to signal for high density circuits in disk drives, personal computers, measuring and telephone equipment
- Operating temperature range: -55° C ... +125° C
- Suitable for reflow and wave soldering
- Lab kit available

DIMENSIONS (mm)

SIZE	L	W	t	c
0603 (1J)	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.36 ± 0.15
0805 (2A)	2.00 ± 0.20	1.25 ± 0.20	0.90 ± 0.20	0.51 ± 0.25
1206 (2B)	3.20 ± 0.20	1.60 ± 0.20	1.10 ± 0.20	0.51 ± 0.25

RATING

TYPE	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE	QUALITY FACTOR (MIN.)	L/Q MEASURING FREQUENCY	SELF-RESONANT FREQUENCY (MIN.)	DC RESISTANCE (MAX.)	ALLOWABLE DC CURRENT (MAX.)				
MCL 1J H □ TE 047 M	0.047 µH	M (±20%)	10	50 MHz	260 MHz	0.30 Ω	50 mA				
MCL 1J H □ TE 068 M	0.068 µH										
MCL 1J H □ TE 082 M	0.082 µH										
MCL 1J H □ TE R10 □	0.10 µH										
MCL 1J H □ TE R12 □	0.12 µH										
MCL 1J H □ TE R15 □	0.15 µH										
MCL 1J H □ TE R18 □	0.18 µH										
MCL 1J H □ TE R22 □	0.22 µH										
MCL 1J H □ TE R27 □	0.27 µH										
MCL 1J H □ TE R33 □	0.33 µH										
MCL 1J H □ TE R39 □	0.39 µH	K (±10%)	15	25 MHz	180 MHz	0.50 Ω	35 mA				
MCL 1J H □ TE R82 □	0.82 µH										
MCL 1J H □ TE R56 □	0.56 µH										
MCL 1J H □ TE R68 □	0.68 µH										
MCL 1J H □ TE R82 □	0.82 µH										
MCL 1J J □ TE 1R0 □	1.0 µH				M (±20%)	35		10 MHz	165 MHz	0.60 Ω	25 mA
MCL 1J J □ TE 1R2 □	1.2 µH										
MCL 1J J □ TE 1R5 □	1.5 µH										
MCL 1J J □ TE 1R8 □	1.8 µH										
MCL 1J J □ TE 2R2 □	2.2 µH										
MCL 1J J □ TE 2R7 □	2.7 µH										
MCL 1J J □ TE 3R3 □	3.3 µH										
MCL 1J J □ TE 3R9 □	3.9 µH										
MCL 1J J □ TE 4R7 □	4.7 µH										
MCL 1J J □ TE 5R6 □	5.6 µH	30	4 MHz	2 MHz			150 MHz		0.80 Ω	15 mA	
MCL 1J J □ TE 6R8 □	6.8 µH										
MCL 1J J □ TE 8R2 □	8.2 µH										
MCL 1J J □ TE 100 □	10 µH										
MCL 1J J □ TE 120 □	12 µH										
MCL 1J J □ TE 100 □	10 µH										
MCL 1J J □ TE 120 □	12 µH	30	2 MHz	2 MHz	136 MHz	0.80 Ω	3 mA				
MCL 1J J □ TE 150 □	1.5 µH										
MCL 1J J □ TE 180 □	1.8 µH										
MCL 1J J □ TE 220 □	2.2 µH										
MCL 1J J □ TE 270 □	2.7 µH										
MCL 1J J □ TE 330 □	3.3 µH										

□ Enter the code for termination surface material (T, L)
□ Enter the code for inductance tolerance (K, M) - other tolerances available upon request.

MULTILAYER FERRITE INDUCTORS MCL (MCI)

RATING

TYPE	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE	QUALITY FACTOR (MIN.)	L/Q MEASURING FREQUENCY	SELF-RESONANT FREQUENCY (MIN.)	DC RESISTANCE (MAX.)	ALLOWABLE DC CURRENT (MAX.)
MCL 2A H <input type="checkbox"/> TE 047 M	0.047 µH	M (±20%)	15	50 MHz	320 MHz	0.20 Ω	300 mA
MCL 2A H <input type="checkbox"/> TE 068 M	0.068 µH				280 MHz		
MCL 2A H <input type="checkbox"/> TE 082 M	0.082 µH				255 MHz		
MCL 2A H <input type="checkbox"/> TE R10 <input type="checkbox"/>	0.10 µH	K (±10%)	20	25 MHz	235 MHz	0.30 Ω	250 mA
MCL 2A H <input type="checkbox"/> TE R12 <input type="checkbox"/>	0.12 µH				220 MHz		
MCL 2A H <input type="checkbox"/> TE R15 <input type="checkbox"/>	0.15 µH				200 MHz		
MCL 2A H <input type="checkbox"/> TE R18 <input type="checkbox"/>	0.18 µH				185 MHz		
MCL 2A H <input type="checkbox"/> TE R22 <input type="checkbox"/>	0.22 µH				170 MHz		
MCL 2A H <input type="checkbox"/> TE R27 <input type="checkbox"/>	0.27 µH				150 MHz		
MCL 2A H <input type="checkbox"/> TE R33 <input type="checkbox"/>	0.33 µH				145 MHz		
MCL 2A H <input type="checkbox"/> TE R39 <input type="checkbox"/>	0.39 µH				135 MHz		
MCL 2A H <input type="checkbox"/> TE R47 <input type="checkbox"/>	0.47 µH				125 MHz		
MCL 2A H <input type="checkbox"/> TE R56 <input type="checkbox"/>	0.56 µH				115 MHz		
MCL 2A H <input type="checkbox"/> TE R68 <input type="checkbox"/>	0.68 µH	105 MHz	0.75 Ω	150 mA			
MCL 2A H <input type="checkbox"/> TE R82 <input type="checkbox"/>	0.82 µH	100 MHz	0.80 Ω				
MCL 2A H <input type="checkbox"/> TE R82 <input type="checkbox"/>	0.82 µH	100 MHz	1.00 Ω				
MCL 2A J <input type="checkbox"/> TE 1R0 <input type="checkbox"/>	1.0 µH	M (±20%)	45	10 MHz	75 MHz	0.40 Ω	50 mA
MCL 2A J <input type="checkbox"/> TE 1R2 <input type="checkbox"/>	1.2 µH				65 MHz	0.50 Ω	
MCL 2A J <input type="checkbox"/> TE 1R5 <input type="checkbox"/>	1.5 µH	K (±10%)	50	4 MHz	60 MHz	0.60 Ω	30 mA
MCL 2A J <input type="checkbox"/> TE 1R8 <input type="checkbox"/>	1.8 µH				55 MHz		
MCL 2A J <input type="checkbox"/> TE 2R2 <input type="checkbox"/>	2.2 µH				50 MHz		
MCL 2A J <input type="checkbox"/> TE 2R7 <input type="checkbox"/>	2.7 µH				45 MHz		
MCL 2A J <input type="checkbox"/> TE 3R3 <input type="checkbox"/>	3.3 µH				41 MHz		
MCL 2A J <input type="checkbox"/> TE 3R9 <input type="checkbox"/>	3.9 µH				38 MHz		
MCL 2A J <input type="checkbox"/> TE 4R7 <input type="checkbox"/>	4.7 µH				35 MHz		
MCL 2A J <input type="checkbox"/> TE 5R6 <input type="checkbox"/>	5.6 µH				32 MHz		
MCL 2A J <input type="checkbox"/> TE 6R8 <input type="checkbox"/>	6.8 µH				29 MHz		
MCL 2A J <input type="checkbox"/> TE 8R2 <input type="checkbox"/>	8.2 µH				26 MHz		
MCL 2A J <input type="checkbox"/> TE 100 <input type="checkbox"/>	10 µH	M (±20%)	50	2 MHz	24 MHz	1.10 Ω	15 mA
MCL 2A J <input type="checkbox"/> TE 100 <input type="checkbox"/>	10 µH				24 MHz	1.15 Ω	
MCL 2B H <input type="checkbox"/> TE 047 M	0.047 µH	M (±20%)	15	50 MHz	320 MHz	0.15 Ω	300 mA
MCL 2B H <input type="checkbox"/> TE 068 M	0.068 µH				280 MHz		
MCL 2B H <input type="checkbox"/> TE R10 <input type="checkbox"/>	0.10 µH				235 MHz		
MCL 2B H <input type="checkbox"/> TE R12 <input type="checkbox"/>	0.12 µH	K (±10%)	20	25 MHz	220 MHz	0.30 Ω	250 mA
MCL 2B H <input type="checkbox"/> TE R15 <input type="checkbox"/>	0.15 µH				200 MHz		
MCL 2B H <input type="checkbox"/> TE R18 <input type="checkbox"/>	0.18 µH				185 MHz		
MCL 2B H <input type="checkbox"/> TE R22 <input type="checkbox"/>	0.22 µH				170 MHz		
MCL 2B H <input type="checkbox"/> TE R27 <input type="checkbox"/>	0.27 µH				150 MHz		
MCL 2B H <input type="checkbox"/> TE R33 <input type="checkbox"/>	0.33 µH				145 MHz		
MCL 2B H <input type="checkbox"/> TE R39 <input type="checkbox"/>	0.39 µH				135 MHz		
MCL 2B H <input type="checkbox"/> TE R47 <input type="checkbox"/>	0.47 µH				125 MHz		
MCL 2B H <input type="checkbox"/> TE R56 <input type="checkbox"/>	0.56 µH				115 MHz		
MCL 2B H <input type="checkbox"/> TE R68 <input type="checkbox"/>	0.68 µH				105 MHz	0.70 Ω	
MCL 2B H <input type="checkbox"/> TE R82 <input type="checkbox"/>	0.82 µH	100 MHz	0.90 Ω				
MCL 2B H <input type="checkbox"/> TE R82 <input type="checkbox"/>	0.82 µH	100 MHz	0.90 Ω				
MCL 2B J <input type="checkbox"/> TE 1R0 <input type="checkbox"/>	1.0 µH	M (±20%)	45	10 MHz	75 MHz	0.40 Ω	100 mA
MCL 2B J <input type="checkbox"/> TE 1R2 <input type="checkbox"/>	1.2 µH				65 MHz	0.50 Ω	
MCL 2B J <input type="checkbox"/> TE 1R5 <input type="checkbox"/>	1.5 µH	K (±10%)	50	4 MHz	60 MHz	0.50 Ω	25 mA
MCL 2B J <input type="checkbox"/> TE 1R8 <input type="checkbox"/>	1.8 µH				55 MHz		
MCL 2B J <input type="checkbox"/> TE 2R2 <input type="checkbox"/>	2.2 µH				50 MHz		
MCL 2B J <input type="checkbox"/> TE 2R7 <input type="checkbox"/>	2.7 µH				45 MHz		
MCL 2B J <input type="checkbox"/> TE 3R3 <input type="checkbox"/>	3.3 µH				41 MHz		
MCL 2B J <input type="checkbox"/> TE 3R9 <input type="checkbox"/>	3.9 µH				38 MHz		
MCL 2B J <input type="checkbox"/> TE 4R7 <input type="checkbox"/>	4.7 µH				35 MHz		
MCL 2B J <input type="checkbox"/> TE 5R6 <input type="checkbox"/>	5.6 µH				32 MHz		
MCL 2B J <input type="checkbox"/> TE 6R8 <input type="checkbox"/>	6.8 µH				29 MHz		
MCL 2B J <input type="checkbox"/> TE 8R2 <input type="checkbox"/>	8.2 µH				26 MHz		
MCL 2B J <input type="checkbox"/> TE 100 <input type="checkbox"/>	10 µH	M (±20%)	50	2 MHz	24 MHz	1.00 Ω	15 mA
MCL 2B J <input type="checkbox"/> TE 120 <input type="checkbox"/>	12 µH				22 MHz	1.05 Ω	
MCL 2B J <input type="checkbox"/> TE 150 <input type="checkbox"/>	15 µH	K (±10%)	30	1 MHz	19 MHz	0.70 Ω	5 mA
MCL 2B J <input type="checkbox"/> TE 180 <input type="checkbox"/>	18 µH				18 MHz		
MCL 2B J <input type="checkbox"/> TE 220 <input type="checkbox"/>	22 µH				16 MHz		
MCL 2B J <input type="checkbox"/> TE 270 <input type="checkbox"/>	27 µH	M (±20%)	30	0.4 MHz	14 MHz	0.9 Ω	5 mA
MCL 2B J <input type="checkbox"/> TE 330 <input type="checkbox"/>	33 µH				13 MHz		

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

INDUCTORS

- Enter the code for termination surface material (T, L)
- Enter the code for inductance tolerance (K, M) - other tolerances available upon request.