Inductors

Commercial, Molded, Shielded, Miniature



FEATURES

- Flame retardant coating
- Electromagnetic shield
- Small package for a shielded inductor
- Epoxy molded construction provides superior moisture protection
- Precision performance, excellent reliability, sturdy construction

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 % standard. ± 5 % available
Insulation Resistance: 1000 Megohm minimum per MIL-STD-202, Method 302, Test Condition B

Dielectric Withstanding Voltage: 200 VAC per MIL-STD-202, Method 301 (sea level).

Percent Coupling: 3 % maximum per MIL-PRF-15305
Operating Temperature Range: - 55 °C to + 105 °C

STANDARD ELECTRICAL SPECIFICATIONS

IND. (µH)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-* RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED** DC CURRENT (mA)	
0.10	± 10 %	54	25.0	490.0	0.10	670	IRON CORE
0.12	± 10 %	52	25.0	430.0	0.11	635	
0.15	± 10 %	50	25.0	415.0	0.12	610	
0.18	± 10 %	49	25.0	375.0	0.13	585	
0.22	± 10 %	47	25.0	330.0	0.15	545	
0.27	± 10 %	46	25.0	300.0	0.16	530	
0.33	± 10 %	44	25.0	260.0	0.18	495	
0.39	± 10 %	42	25.0	230.0	0.19	485	
0.47	± 10 %	41	25.0	220.0	0.21	460	
0.56	± 10 %	41	25.0	210.0	0.23	440	
0.68	± 10 %	39	25.0	180.0	0.24	430	
0.82	± 10 %	38	25.0	165.0	0.27	405	
1.0	± 10 %	37	25.0	150.0	0.30	385	
1.2	± 10 %	40	7.9	130.0	0.73	247	IRON CORE
1.5	± 10 %	41	7.9	115.0	0.86	228	
1.8	± 10 %	43	7.9	105.0	0.95	217	
2.2	± 10 %	45	7.9	95.0	1.1	202	
2.7	± 10 %	48	7.9	90.0	1.2	193	
3.3	± 10 %	49	7.9	80.0	1.3	185	
3.9	± 10 %	50	7.9	75.0	1.5	173	
4.7	± 10 %	53	7.9	70.0	2.4	136	
5.6	± 10 %	54	7.9	60.0	2.9	124	
6.8	± 10 %	55	7.9	55.0	3.2	118	
8.2	± 10 %	55	7.9	53.0	3.6	111	
10.0	± 10 %	57	7.9	50.0	4.0	106	
12.0	± 10 %	36	2.5	35.0	3.0	122	
15.0	± 10 %	38	2.5	30.0	3.4	115	
18.0	± 10 %	40	2.5	26.0	3.8	108	
22.0	± 10 %	40	2.5	24.0	4.9	96	
27.0	± 10 %	40	2.5	21.0	5.8	88	
33.0	± 10 %	41	2.5	20.0	6.5	83	
39.0	± 10 %	42	2.5	19.0	7.9	75	
47.0	± 10 %	44	2.5	16.0	9.3	69	
56.0	± 10 %	44	2.5	15.0	11.0	64	
68.0	± 10 %	45	2.5	13.0	12.0	61	
82.0	± 10 %	45	2.5	11.0	13.0	59	
100.0	± 10 %	40	2.5	10.5	16.8	51	

* Measured with full length lead. ** **Rated DC Current:** Based on the maximum temperature rise not to exceed 15 °C at + 90 °C ambient.

MECHANICAL SPECIFICATIONS

Terminal Strength: 3 pounds pull per MIL-STD-202, Method 211, Test Condition A except 180° rotation for a total of 540 °C
Weight: IMS-2 = 0.30 grams maximum

MATERIAL SPECIFICATIONS

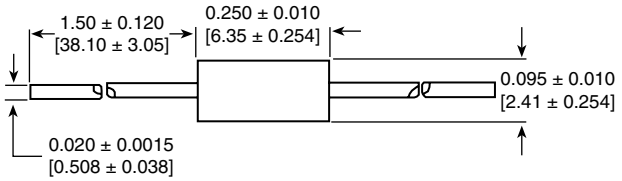
Encapsulant: Epoxy
Standard Terminal: #24 AWG tinned copper

TEST EQUIPMENT*

- H/P 4342A Q-Meter
- Measurements Corporation Megacycle Meter, Model 59
- Wheatstone Bridge

* Test procedures per MIL-PRF-15305

DIMENSIONS in inches [millimeters]



ENVIRONMENTAL PERFORMANCE

TEST	CONDITIONS	SPECIFICATIONS
Barometric Pressure	Test Condition C	MIL-STD-202, Method 105
Thermal Shock	Test Condition A-1	MIL-STD-202, Method 107
Flammability	-	MIL-STD-202, Method 111
Overload	-	MIL-PRF-15305
Low Temperature Storage	-	MIL-PRF-15305
Resistance to Soldering Heat	Test Condition A	MIL-STD-202, Method 210
Resistance to Solvents	-	MIL-STD-202, Method 215

ORDERING INFORMATION

IMS-2	10 µH	± 10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER INFORMATION

I	M	S	0	2	E	R	1	0	0	K
MODEL					PACKING CODE		INDUCTANCE VALUE			TOL.

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