

Inductors, Commercial, Molded, Shielded, Miniature, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ standard, $\pm 5\%$ available

Insulation Resistance: 1000 M Ω minimum per MIL-STD-202, method 302, test condition B

Dielectric Withstanding Voltage: 200 V_{AC} per MIL-STD-202, method 301 (at sea level)

Percent Coupling: 3 % maximum per MIL-PRF-15305

Operating Temperature: - 55 °C to + 105 °C

ENVIRONMENTAL PERFORMANCE		
TEST	CONDITIONS	SPECIFICATIONS
Barometric Pressure	C	MIL-STD-202, method 105
Thermal Shock	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	A	MIL-STD-202, method 210
Resistance to Solvents	-	MIL-STD-202, method 215

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
- Compliant to RoHS Directive 2002/95/EC



RoHS
COMPLIANT

MECHANICAL SPECIFICATIONS

Terminal Strength: 3 lb pull per MIL-STD-202, method 211, test condition A, except 180° rotation for a total of 540°

Weight: IMS-2 = 0.30 g maximum

TEST EQUIPMENT ⁽¹⁾

- H/P 4342A Q-meter
- Measurements corporation megacycle meter, model 59
- Wheatstone bridge

Note

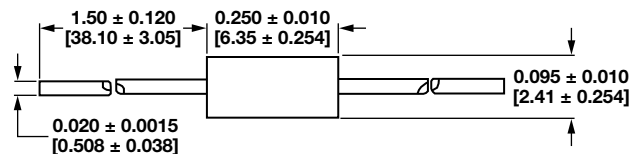
⁽¹⁾ Test procedure per MIL-PRF-15305

MATERIAL SPECIFICATIONS

Encapsulant: Epoxy

Standard Terminals: #24 AWG, tinned copper

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY L AND Q (MHz)	SRF MIN. (MHz) ⁽¹⁾	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽²⁾	IRON CORE
IMS-2	0.10	± 10	54	25.0	490.0	0.10	670	
IMS-2	0.12	± 10	52	25.0	430.0	0.11	635	
IMS-2	0.15	± 10	50	25.0	415.0	0.12	610	
IMS-2	0.18	± 10	49	25.0	375.0	0.13	585	
IMS-2	0.22	± 10	47	25.0	330.0	0.15	545	
IMS-2	0.27	± 10	46	25.0	300.0	0.16	530	
IMS-2	0.33	± 10	44	25.0	260.0	0.18	495	
IMS-2	0.39	± 10	42	25.0	230.0	0.19	485	
IMS-2	0.47	± 10	41	25.0	220.0	0.21	460	
IMS-2	0.56	± 10	41	25.0	210.0	0.23	440	
IMS-2	0.68	± 10	39	25.0	180.0	0.24	430	
IMS-2	0.82	± 10	38	25.0	165.0	0.27	405	
IMS-2	1.0	± 10	37	25.0	150.0	0.30	385	

Notes

⁽¹⁾ Measured with full length lead

⁽²⁾ Rated DC current based on maximum temperature rise as shown in table



STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY L AND Q (MHz)	SRF MIN. (MHz) ⁽¹⁾	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽²⁾
IMS-2	1.2	± 10	40	7.9	130.0	0.73	247
IMS-2	1.5	± 10	41	7.9	115.0	0.86	228
IMS-2	1.8	± 10	43	7.9	105.0	0.95	217
IMS-2	2.2	± 10	45	7.9	95.0	1.1	202
IMS-2	2.7	± 10	48	7.9	90.0	1.2	193
IMS-2	3.3	± 10	49	7.9	80.0	1.3	185
IMS-2	3.9	± 10	50	7.9	75.0	1.5	173
IMS-2	4.7	± 10	53	7.9	70.0	2.4	136
IMS-2	5.6	± 10	54	7.9	60.0	2.9	124
IMS-2	6.8	± 10	55	7.9	55.0	3.2	118
IMS-2	8.2	± 10	55	7.9	53.0	3.6	111
IMS-2	10.0	± 10	57	7.9	50.0	4.0	106
IMS-2	12.0	± 10	36	2.5	35.0	3.0	122
IMS-2	15.0	± 10	38	2.5	30.0	3.4	115
IMS-2	18.0	± 10	40	2.5	26.0	3.8	108
IMS-2	22.0	± 10	40	2.5	24.0	4.9	96
IMS-2	27.0	± 10	40	2.5	21.0	5.8	88
IMS-2	33.0	± 10	41	2.5	20.0	6.5	83
IMS-2	39.0	± 10	42	2.5	19.0	7.9	75
IMS-2	47.0	± 10	44	2.5	16.0	9.3	69
IMS-2	56.0	± 10	44	2.5	15.0	11.0	64
IMS-2	68.0	± 10	45	2.5	13.0	12.0	61
IMS-2	82.0	± 10	45	2.5	11.0	13.0	59
IMS-2	100.0	± 10	40	2.5	10.5	16.8	51

IRON CORE

Notes

⁽¹⁾ Measured with full length lead

⁽²⁾ Rated DC current based on maximum temperature rise as shown in table

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

GLOBAL PART NUMBER			
I	M	S	0 2
E	R	1 0 0	K
MODEL			PACKAGE CODE
INDUCTANCE VALUE		INDUCTANCE TOLERANCE	



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