VISHAY

IMS-2

Vishay Dale

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

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 % standard, ± 5 % available

Insulation Resistance: 1000 MΩ 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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

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

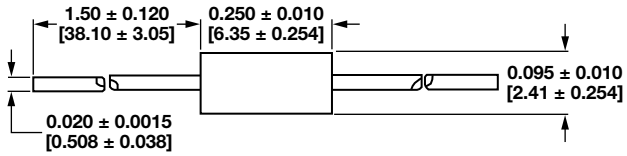
(1) Test procedure per MIL-PRF-15305

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)	
IMS-2	0.10	± 10	54	25.0	490.0	0.10	670	IRON CORE
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	IRON CORE
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	

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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