

Inductors, High Current, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 5 %, ± 10 %, ± 20 %, other tolerances available on request

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

Operating Temperature: - 55 °C to + 105 °C (no load), - 55 °C to + 80 °C (at full rated current)

ENVIRONMENTAL PERFORMANCE		
TEST	CONDITIONS	SPECIFICATIONS
Flammability	-	MIL-STD-202, method 111
Resistance to Soldering Heat	A	MIL-STD-202, method 210
Resistance to Solvents	-	MIL-STD-202, method 215

FEATURES

- Wide inductance range in small package
- Flame retardant coating
- Epoxy molded construction provides superior moisture protection
- Superior electrical specifications, high Q and self resonant frequency, low DC resistance, high rated DC current
- Compliant to RoHS directive 2002/95/EC



MECHANICAL SPECIFICATIONS

Terminal Strength: 5 lb pull per MIL-STD-202, method 211, test condition A

MATERIAL SPECIFICATIONS

Core Material: Ferrite

Encapsulant: Epoxy

Standard Terminals: Tinned copper

DIMENSIONS in inches [millimeters]					
MODEL		A (DIA.)	B	C (TYP.)	D (DIA.)
IM-6-38	Max.	0.200 [5.08]	0.450 [11.43]	1.63 [41.40]	0.027 [0.686]
	Min.	0.180 [4.57]	0.430 [10.92]	1.25 [31.75]	0.023 [0.584]

STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	IND. (μH)	TOL. (%)	TEST FREQUENCY L AND Q (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
IM-6-38	0.22	20	55	25.00	360	0.024	2380
IM-6-38	0.27	20	55	25.00	340	0.026	2210
IM-6-38	0.33	20	55	25.00	320	0.030	2070
IM-6-38	0.39	20	55	25.00	260	0.033	2000
IM-6-38	0.47	20	55	25.00	200	0.036	1910
IM-6-38	0.56	20	55	25.00	195	0.040	1860
IM-6-38	0.68	20	55	25.00	190	0.043	1810
IM-6-38	0.82	20	55	25.00	175	0.048	1730
IM-6-38	1.0	10	55	25.00	160	0.053	1650
IM-6-38	1.2	10	65	7.90	145	0.058	1570
IM-6-38	1.5	10	65	7.90	125	0.067	1490
IM-6-38	1.8	10	65	7.90	95	0.075	1430
IM-6-38	2.2	10	65	7.90	85	0.083	1370
IM-6-38	2.7	10	65	7.90	47	0.095	1300
IM-6-38	3.3	10	65	7.90	45	0.100	1230
IM-6-38	3.9	10	55	7.90	35	0.110	1210
IM-6-38	4.7	10	55	7.90	30	0.120	1190
IM-6-38	5.6	10	55	7.90	26	0.135	1100
IM-6-38	6.8	10	55	7.90	24	0.155	1020
IM-6-38	8.2	10	45	7.90	22	0.165	975



STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	IND. (μH)	TOL. (%)	TEST FREQUENCY L AND Q (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
IM-6-38	10	10	45	7.90	20	0.175	940
IM-6-38	12	10	55	2.50	32	0.320	775
IM-6-38	15	10	55	2.50	32	0.390	645
IM-6-38	18	10	55	2.50	23	0.475	625
IM-6-38	22	10	55	2.50	23	0.565	600
IM-6-38	27	10	55	2.50	20	0.650	560
IM-6-38	33	10	55	2.50	20	0.720	520
IM-6-38	39	10	45	2.50	19	0.780	495
IM-6-38	47	10	45	2.50	19	0.830	465
IM-6-38	56	10	45	2.50	14	0.900	450
IM-6-38	68	10	45	2.50	14	0.980	440
IM-6-38	82	10	30	2.50	4.5	1.070	420
IM-6-38	100	10	30	2.50	4.5	1.150	400
IM-6-38	120	10	55	0.79	4.0	1.450	365
IM-6-38	150	10	55	0.79	3.4	1.660	340
IM-6-38	180	10	60	0.79	8.5	2.800	240
IM-6-38	220	10	60	0.79	8.2	3.100	235
IM-6-38	270	10	60	0.79	5.8	3.150	230
IM-6-38	330	10	60	0.79	5.5	4.300	205
IM-6-38	390	10	60	0.79	5.1	4.400	190
IM-6-38	470	10	60	0.79	2.1	4.500	185

MARKING
<ul style="list-style-type: none"> - Vishay Dale - Inductance value - Date code

ORDERING INFORMATION				
IM-6-38	3.9 μH	± 10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER											
I	M	0	6	E	R	3	R	9	K	3	8
MODEL				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	



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