

## Inductors Medium Current



**RoHS  
COMPLIANT**

**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

**ELECTRICAL SPECIFICATIONS**

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

**Insulation Resistance:** 1000 Megohm 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)

**MECHANICAL SPECIFICATIONS**

**Terminal Strength:** 5 pounds pull per MIL-STD-202, Method 211, Test Condition A

**MATERIAL SPECIFICATIONS**

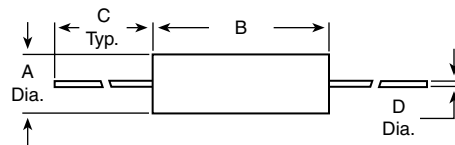
**Core Material:** Ferrite

**Encapsulant:** Epoxy

**Terminals:** Tinned copper, standard

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)
0.22	± 20 %	55	25.00	360.0	0.024	2380
0.27	± 20 %	55	25.00	340.0	0.026	2210
0.33	± 20 %	55	25.00	320.0	0.030	2070
0.39	± 20 %	55	25.00	260.0	0.033	2000
0.47	± 20 %	55	25.00	200.0	0.036	1910
0.56	± 20 %	55	25.00	195.0	0.040	1860
0.68	± 20 %	55	25.00	190.0	0.043	1810
0.82	± 20 %	55	25.00	175.0	0.048	1730
1.0	± 10 %	55	25.00	160.0	0.053	1650
1.2	± 10 %	65	7.90	145.0	0.058	1570
1.5	± 10 %	65	7.90	125.0	0.067	1490
1.8	± 10 %	65	7.90	95.0	0.075	1430
2.2	± 10 %	65	7.90	85.0	0.083	1370
2.7	± 10 %	65	7.90	47.0	0.095	1300
3.3	± 10 %	65	7.90	45.0	0.100	1230
3.9	± 10 %	55	7.90	35.0	0.110	1210
4.7	± 10 %	55	7.90	30.0	0.120	1190
5.6	± 10 %	55	7.90	26.0	0.135	1100
6.8	± 10 %	55	7.90	24.0	0.155	1020
8.2	± 10 %	45	7.90	22.0	0.165	975
10.0	± 10 %	45	7.90	20.0	0.175	940
12.0	± 10 %	55	2.50	32.0	0.320	775
15.0	± 10 %	55	2.50	32.0	0.390	645
18.0	± 10 %	55	2.50	23.0	0.475	625
22.0	± 10 %	55	2.50	23.0	0.565	600
27.0	± 10 %	55	2.50	20.0	0.650	560
33.0	± 10 %	55	2.50	20.0	0.720	520
39.0	± 10 %	45	2.50	19.0	0.780	495
47.0	± 10 %	45	2.50	19.0	0.830	465
56.0	± 10 %	45	2.50	14.0	0.900	450
68.0	± 10 %	45	2.50	14.0	0.980	440
82.0	± 10 %	30	2.50	4.5	1.070	420
100.0	± 10 %	30	2.50	4.5	1.150	400
120.0	± 10 %	55	0.79	4.0	1.450	365
150.0	± 10 %	55	0.79	3.4	1.660	340
180.0	± 10 %	60	0.79	8.5	2.800	240
220.0	± 10 %	60	0.79	8.2	3.100	235
270.0	± 10 %	60	0.79	5.8	3.150	230
330.0	± 10 %	60	0.79	5.5	4.300	205
390.0	± 10 %	60	0.79	5.1	4.400	190
470.0	± 10 %	60	0.79	2.1	4.500	185

**DIMENSIONS** in inches [millimeters]



MODEL		A (Dia.)	B	C (Typ.)	D (Dia.)
IM-6-38	Maximum	0.200 [5.08]	0.450 [11.43]	1.63 [41.40]	0.027 [0.686]
	Minimum	0.180 [4.57]	0.430 [10.92]	1.25 [31.75]	0.023 [0.584]

**ENVIRONMENTAL PERFORMANCE**

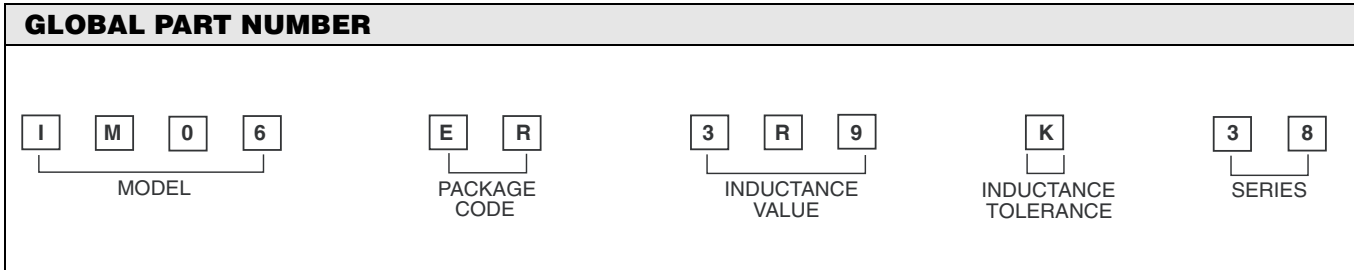
TEST	CONDITIONS	SPECIFICATIONS
Flammability	-	MIL-STD-202, Method 111
Resistance to Soldering Heat	Test Condition A	MIL-STD-202, Method 210
Resistance to Solvents	-	MIL-STD-202, Method 215

**MARKING**

- Vishay Dale
- Inductance value
- Date code



ORDERING INFORMATION				
IMS-6-38	3.9 $\mu$ H	10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD





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