



Inductors, Military, MIL-PRF-15305 Qualified, Type LT, Molded, Shielded, Axial Leaded



FEATURES

- Wide inductance range in small package
- Flame retardant coating
- Electromagnetic shield - finest shield available
- Epoxy molded construction provides superior moisture protection
- Precision performance, excellent reliability, sturdy construction

INDUCTANCE RANGE AND MILITARY STANDARD						
MILITARY STANDARD	INDUCTANCE RANGE (μ H)		CLASSIFICATION		MATERIAL	
	FROM	TO	GRADE	CLASS	CORE	SHIELD
MS75087	0.10	0.82	1	A	Phenolic	Powdered Iron
MS75088	1.0	12	1	A	Powdered Iron	Powdered Iron

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ standard

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

Dielectric Withstanding Voltage: 1000 V_{AC} per MIL-STD-202, method 301 (sea level)

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

Operating Temperature Range: -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

MECHANICAL SPECIFICATIONS

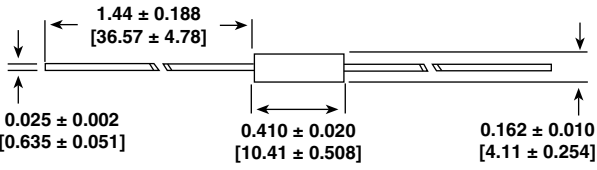
Terminal Strength: 5 pounds pull per MIL-STD-202, method 211, test condition A

Weight: 0.85 g maximum

MATERIAL SPECIFICATIONS

Encapsulant: Epoxy

Standard Terminal: #22 AWG tinned copper

DIMENSIONS in inches [millimeters]	
	
1.44 \pm 0.188 [36.57 \pm 4.78]	
0.025 \pm 0.002 [0.635 \pm 0.051]	0.410 \pm 0.020 [10.41 \pm 0.508]
	0.162 \pm 0.010 [4.11 \pm 0.254]



STANDARD ELECTRICAL SPECIFICATIONS									
MODEL	IND. (μH)	TOL. (%)	MILITARY STANDARD	MILITARY TYPE	Q MIN.	TEST FREQ. L AND Q (MHz)	SRF MIN. (MHz) ⁽¹⁾	DCR AT 25 °C MAX. (Ω)	RATED DC CURRENT (mA) ⁽²⁾
MS75087	0.10	± 10	- 1	191	50	25.0	250.0	0.025	1790
	0.12	± 10	- 2	192	51	25.0	250.0	0.034	1530
	0.15	± 10	- 3	193	51	25.0	250.0	0.037	1470
	0.18	± 10	- 4	194	50	25.0	250.0	0.047	1300
	0.22	± 10	- 5	195	49	25.0	250.0	0.067	1100
	0.27	± 10	- 6	196	47	25.0	250.0	0.11	855
	0.33	± 10	- 7	197	46	25.0	250.0	0.13	780
	0.39	± 10	- 8	198	44	25.0	250.0	0.18	670
	0.47	± 10	- 9	199	44	25.0	235.0	0.25	565
	0.56	± 10	- 10	200	43	25.0	210.0	0.33	490
	0.68	± 10	- 11	201	42	25.0	190.0	0.45	420
	0.82	± 10	- 12	202	40	25.0	180.0	0.59	370
MS75088	1.0	± 10	- 1	203	44	25.0	140.0	0.07	1070
	1.2	± 10	- 2	204	44	7.9	130.0	0.10	895
	1.5	± 10	- 3	205	44	7.9	115.0	0.12	815
	1.8	± 10	- 4	206	44	7.9	105.0	0.14	775
	2.2	± 10	- 5	207	44	7.9	100.0	0.19	650
	2.7	± 10	- 6	208	44	7.9	92.0	0.28	535
	3.3	± 10	- 7	209	44	7.9	85.0	0.35	480
	3.9	± 10	- 8	210	44	7.9	75.0	0.40	450
	4.7	± 10	- 9	211	44	7.9	70.0	0.55	380
	5.6	± 10	- 10	212	44	7.9	65.0	0.72	335
	6.8	± 10	- 11	213	50	7.9	55.0	1.02	280
	8.2	± 10	- 12	214	50	7.9	50.0	1.32	250
	10.0	± 10	- 13	215	50	7.9	46.0	1.62	220
	12.0	± 10	- 14	216	55	2.5	44.0	2.0	200

Notes

- (1) Measured with full length lead
- (2) Rated DC current: Based on maximum temperature rise not to exceed 15 °C at + 90 °C ambient

DESCRIPTION - MILITARY PART NUMBER						
MS75088	-13	LT	10	K	215	
MILITARY STANDARD	INDUCTANCE VALUE	OR TYPE	GRADE AND CLASS	FAMILY	ID NUMBER	

GLOBAL PART NUMBER											
M	S	7	5	0	8	8	-	1	3	R	U
PRODUCT FAMILY						INDUCTANCE VALUE			PACKAGE CODE		



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