

Inductors

Military, MIL/PRF/15305 Qualified, Type LT
Molded, Shielded



INDUCTANCE RANGE AND MILITARY STANDARD

INDUCTANCE RANGE		CLASSIFICATION		MATERIAL		MILITARY STANDARD
FROM	TO	GRADE	CLASS	CORE	SHIELD	
0.10 μ H	0.82 μ H	1	A	Phenolic	Powd. Iron	MS75087
1.0 μ H	12.0 μ H	1	A	Powd. Iron	Powd. Iron	MS75088

ENVIRONMENTAL PERFORMANCE

TEST	CONDITIONS	SPECIFICATIONS
Barometric Pressure	Test Condition C	MIL-STD-202, Method 105
Thermal Shock	Test Condition 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	Test Condition A	MIL-STD-202, Method 210
Resistance to Solvents	-	MIL-STD-202, Method 215

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μ H)	TOL.	MILITARY STANDARD	MILITARY TYPE	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT* FREQ. MIN. (MHz)	DCR at 25 °C MAX. (Ohms)	RATED DC** CURRENT (mA)
MS75087	0.10	$\pm 10\%$	- 1	LT10K 191	50	25.0	250.0	0.025	1790
	0.12	$\pm 10\%$	- 2	192	51	25.0	250.0	0.034	1530
	0.15	$\pm 10\%$	- 3	193	51	25.0	250.0	0.037	1470
	0.18	$\pm 10\%$	- 4	194	50	25.0	250.0	0.047	1300
	0.22	$\pm 10\%$	- 5	195	49	25.0	250.0	0.067	1100
	0.27	$\pm 10\%$	- 6	196	47	25.0	250.0	0.11	855
	0.33	$\pm 10\%$	- 7	197	46	25.0	250.0	0.13	780
	0.39	$\pm 10\%$	- 8	198	44	25.0	250.0	0.18	670
	0.47	$\pm 10\%$	- 9	199	44	25.0	235.0	0.25	565
	0.56	$\pm 10\%$	- 10	200	43	25.0	210.0	0.33	490
	0.68	$\pm 10\%$	- 11	201	42	25.0	190.0	0.45	420
	0.82	$\pm 10\%$	- 12	202	40	25.0	180.0	0.59	370

* Measured with full length lead.

** Rated DC Current: Based on maximum temperature rise not to exceed 15 °C at + 90 °C ambient.

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

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ standard

Insulation Resistance: 1000 Megohm minimum per MIL-STD-202, Method 302, Test Condition B

Dielectric Withstanding Voltage: 1000 VAC per MIL-STD-202, Method 301 (sea level)

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

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

MECHANICAL SPECIFICATIONS

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

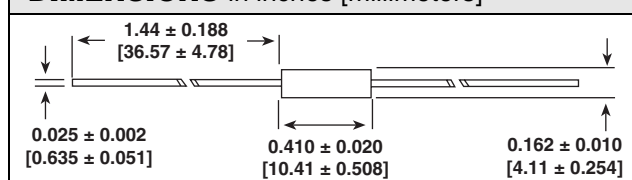
Weight: 0.85 grams maximum

MATERIAL SPECIFICATIONS

Encapsulant: Epoxy

Standard Terminal: #22 AWG tinned copper

DIMENSIONS in inches [millimeters]



**STANDARD ELECTRICAL SPECIFICATIONS**

MODEL	IND. (μ H)	TOL.	MILITARY STANDARD	MILITARY TYPE	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT* FREQ. MIN. (MHz)	DCR at 25 °C MAX. (Ohms)	RATED DC** CURRENT (mA)
MS75088	1.0	$\pm 10\%$	- 1	LT10K 203	44	25.0	140.0	0.07	1070
	1.2	$\pm 10\%$	- 2	204	44	7.9	130.0	0.10	895
	1.5	$\pm 10\%$	- 3	205	44	7.9	115.0	0.12	815
	1.8	$\pm 10\%$	- 4	206	44	7.9	105.0	0.14	775
	2.2	$\pm 10\%$	- 5	207	44	7.9	100.0	0.19	650
	2.7	$\pm 10\%$	- 6	208	44	7.9	92.0	0.28	535
	3.3	$\pm 10\%$	- 7	209	44	7.9	85.0	0.35	480
	3.9	$\pm 10\%$	- 8	210	44	7.9	75.0	0.40	450
	4.7	$\pm 10\%$	- 9	211	44	7.9	70.0	0.55	380
	5.6	$\pm 10\%$	- 10	212	44	7.9	65.0	0.72	335
	6.8	$\pm 10\%$	- 11	213	50	7.9	55.0	1.02	280
	8.2	$\pm 10\%$	- 12	214	50	7.9	50.0	1.32	250
	10.0	$\pm 10\%$	- 13	215	50	7.9	46.0	1.62	220
	12.0	$\pm 10\%$	- 14	216	55	2.5	44.0	2.0	200

* Measured with full length lead.

** **Rated DC Current:** Based on maximum temperature rise not to exceed 15 °C at + 90 °C ambient.**DESCRIPTION - MILITARY PART NUMBER**

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

GLOBAL PART NUMBER INFORMATION

<div>M</div> <div>S</div> <div>7</div> <div>5</div> <div>0</div> <div>8</div> <div>8</div>	<div>-</div> <div>1</div> <div>3</div>	<div>R</div> <div>U</div>
MODEL	INDUCTANCE VALUE	PACKAGE CODE



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