

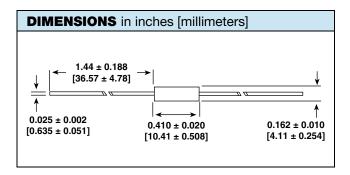
Vishay Dale

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



INDUCTANCE RANGE AND MILITARY STANDARD							
MILITARY STANDARD	RANGE (uH)		CLASSIFICATION		MATERIAL		
	FROM	то	GRADE	CLASS	CORE	SHIELD	
MS75087	0.10	0.82	1	Α	Phenolic	Powdered Iron	
MS75088	1.0	12	1	Α	Powdered Iron	Powdered Iron	

ENVIRONMENTAL PERFORMANCE					
TEST	CONDITIONS	SPECIFICATIONS			
Barometric Pressure	С	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	Δ 3.2				
Resistance to Solvents	-	MIL-STD-202, method 215			



#### **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: ± 10 % standard

Insulation Resistance: 1000  $M\Omega$  minimum per

MIL-STD-202, method 302, test condition B

Dielectric Withstanding Voltage: 1000 V<sub>AC</sub> 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 g maximum

#### **MATERIAL SPECIFICATIONS**

**Encapsulant:** Epoxy

Standard Terminal: #22 AWG tinned copper

## MS75087, MS75088



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

STANDARD ELECTRICAL SPECIFICATIONS									
MODEL	IND. (µH)	TOL. (%)	MILITARY STANDARD	MILITARY TYPE	Q MIN.	TEST FREQ. L AND Q (MHz)	SRF MIN. (MHz) <sup>(1)</sup>	DCR AT 25 °C MAX. (Ω)	RATED DC CURRENT (mA) (2)
				LT10K					
	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
MS75087	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
				LT10K					
	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
MS75088	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

<sup>(2)</sup> Rated DC current: Based on maximum temperature rise not to exceed 15 °C at + 90 °C ambient

DESCRIPTION - MILITARY PART NUMBER							
MS75088	-13	0.0	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 PRODUCT FAMILY	- 1 3  INDUCTANCE VALUE	PACKAGE CODE				

Document Number: 34187 Revison: 10-Jan-11

<sup>(1)</sup> Measured with full length lead





Vishay

### **Disclaimer**

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Document Number: 91000 www.vishay.com Revision: 11-Mar-11