

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



FEATURES

- Flame retardant coating
- Electromagnetic shield
- Small package for a shielded inductor
- Epoxy molded construction provides superior moisture protection
- Precision performance, excellent reliability, sturdy construction

INDUCTANCE RANGE AND MILITARY STANDARD						
MILITARY STANDARD	INDUCTANCE RANGE (μH)		CLASSIFICATION		MATERIAL	
	FROM	TO	GRADE	CLASS	CORE	SHIELD
MS21426	1.2	100	1	A	Powered Iron	Powered Iron

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

DIMENSIONS in inches [millimeters]

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: 200 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

MECHANICAL SPECIFICATIONS

Terminal Strength: 3 pounds pull per MIL-STD-202, method 211, test condition A except 180° rotation for a total of 540 °C

Weight: 0.30 g maximums

MATERIAL SPECIFICATIONS

Encapsulant: Epoxy

Standard Terminal: #24 AWG tinned copper

TEST EQUIPMENT ⁽¹⁾

- H/P 4342A Q-meter
- Measurements corporation megacycle meter, model 59
- Wheatstone bridge

Note

⁽¹⁾ Test procedures per MIL-PRF-15305

STANDARD ELECTRICAL SPECIFICATIONS										
MODEL	IND. (μH)	TOL. (%)	MILITARY STANDARD	MILITARY TYPE	Q MIN.	TEST FREQ. L AND Q (MHz)	SRF MIN. (MHz) ⁽¹⁾	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽²⁾	
MS21426	1.2	± 10	- 14	LT10K 531	40	7.9	130	0.73	247	
	1.5	± 10	- 15	532	41	7.9	115	0.86	228	
	1.8	± 10	- 16	533	43	7.9	105	0.95	217	
	2.2	± 10	- 17	534	45	7.9	95	1.1	202	
	2.7	± 10	- 18	535	48	7.9	90	1.2	193	
	3.3	± 10	- 19	536	49	7.9	80	1.3	185	
	3.9	± 10	- 20	537	50	7.9	75	1.5	173	
	4.7	± 10	- 21	538	53	7.9	70	2.4	136	
	5.6	± 10	- 22	539	54	7.9	60	2.9	124	
	6.8	± 10	- 23	540	55	7.9	55	3.2	118	
	8.2	± 10	- 24	541	55	7.9	53	3.6	111	
	10.0	± 10	- 25	542	57	7.9	50	4.0	106	
	12.0	± 10	- 26	543	36	2.5	35	3.0	122	
	15.0	± 10	- 27	544	38	2.5	30	3.4	115	
	18.0	± 10	- 28	545	40	2.5	26	3.8	108	
	22.0	± 10	- 29	546	40	2.5	24	4.9	96	
	27.0	± 10	- 30	547	40	2.5	21	5.8	88	
	33.0	± 10	- 31	548	41	2.5	20	6.5	83	
	39.0	± 10	- 32	549	42	2.5	19	7.9	75	
	47.0	± 10	- 33	550	44	2.5	16	9.3	69	
56.0	± 10	- 34	551	44	2.5	15	11	64		
68.0	± 10	- 35	552	45	2.5	13	12	61		
82.0	± 10	- 36	553	45	2.5	11	13	59		
100.0	± 10	- 37	554	40	2.5	10.5	16.8	51		

IRON CORE

Notes

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

DESCRIPTION - MILITARY PART NUMBER						
MS21426	-14			LT	10	K 531
MILITARY STANDARD	INDUCTANCE VALUE	OR		TYPE	GRADE AND CLASS	FAMILY ID NUMBER

Note

- Listing of military standard does not imply qualification. Contact factory for latest government QPL information

GLOBAL PART NUMBER										
M	S	2	1	4	2	6	-	1	4	R U
PRODUCT FAMILY						INDUCTANCE VALUE			PACKAGE CODE	



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