

Inductors

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



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

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ standard

Insulation Resistance: 1000 Megohm 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

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

* Measured with full length lead.

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



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 grams maximums

MATERIAL SPECIFICATIONS

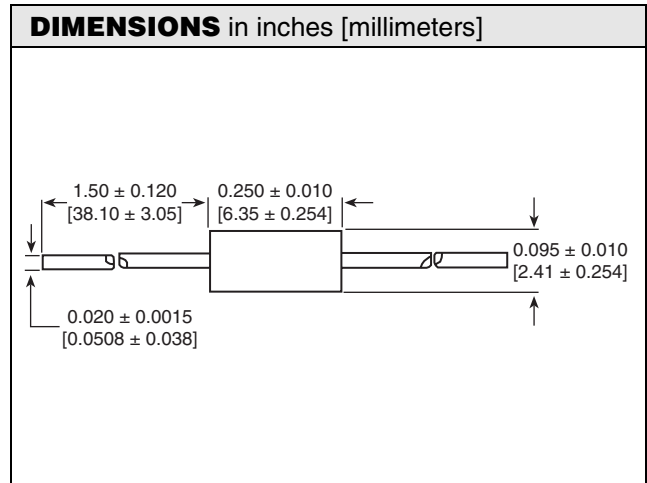
Encapsulant: Epoxy

Standard Terminal: #24 AWG tinned copper

TEST EQUIPMENT*

- H/P 4342A Q-Meter
- Measurements Corporation Megacycle Meter, Model 59
- Wheatstone Bridge

* Test procedures per MIL-PRF-15305



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

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

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

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

GLOBAL PART NUMBER INFORMATION		
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">M</div> <div style="border: 1px solid black; padding: 2px;">S</div> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px;">6</div> </div> <p>MODEL</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">-</div> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">4</div> </div> <p>INDUCTANCE VALUE</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">R</div> <div style="border: 1px solid black; padding: 2px;">U</div> </div> <p>PACKAGE CODE</p>



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