

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 (μH)	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

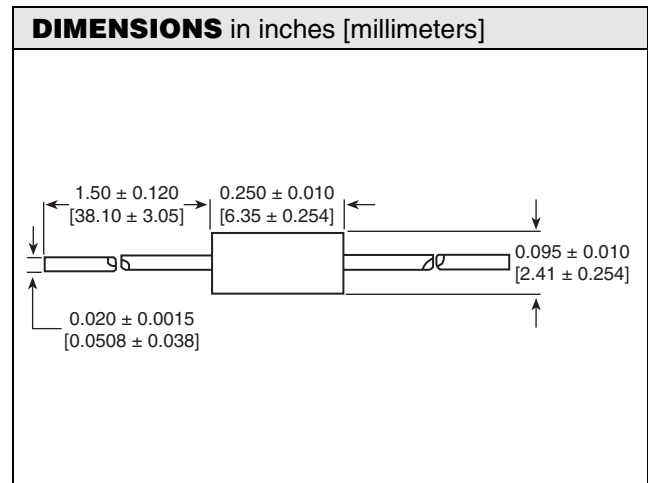
Encapsulant: Epoxy

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						
MS21426	- 14	OR	LT	10	K	531
MILITARY STANDARD	INDUCTANCE VALUE		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 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>



Disclaimer

All product specifications and data are subject to change without notice.

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 herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.