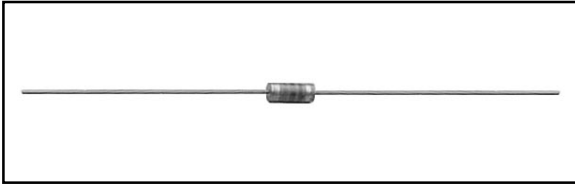


Inductors

*Military, MIL-C-15305 Qualified, Type LT
and Commercial, 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.

STANDARD ELECTRICAL SPECIFICATIONS

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)	INCREMENTAL*** CURRENT
Iron Core									
.10	$\pm 10\%$	MS21426	LT10K	54	25.0	490.0	.10	670	—
.12	$\pm 10\%$	-2	519	52	25.0	430.0	.11	635	—
.15	$\pm 10\%$	-3	520	50	25.0	415.0	.12	610	—
.18	$\pm 10\%$	-4	521	49	25.0	375.0	.13	585	—
.22	$\pm 10\%$	-5	522	47	25.0	330.0	.15	545	—
.27	$\pm 10\%$	-6	523	46	25.0	300.0	.16	530	—
.33	$\pm 10\%$	-7	524	44	25.0	260.0	.18	495	—
.39	$\pm 10\%$	-8	525	42	25.0	230.0	.19	485	—
.47	$\pm 10\%$	-9	526	41	25.0	220.0	.21	460	—
.56	$\pm 10\%$	-10	527	41	25.0	210.0	.23	440	—
.68	$\pm 10\%$	-11	528	39	25.0	180.0	.24	430	—
.82	$\pm 10\%$	-12	529	38	25.0	165.0	.27	405	—
1.0	$\pm 10\%$	-13	530	37	25.0	150.0	.30	385	—
1.2	$\pm 10\%$	-14	531	40	7.9	130.0	.73	247	—
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	95.0	1.1	202	—
2.7	$\pm 10\%$	-18	535	48	7.9	90.0	1.2	193	—
3.3	$\pm 10\%$	-19	536	49	7.9	80.0	1.3	185	—
3.9	$\pm 10\%$	-20	537	50	7.9	75.0	1.5	173	—
4.7	$\pm 10\%$	-21	538	53	7.9	70.0	2.4	136	—
5.6	$\pm 10\%$	-22	539	54	7.9	60.0	2.9	124	—
6.8	$\pm 10\%$	-23	540	55	7.9	55.0	3.2	118	—
8.2	$\pm 10\%$	-24	541	55	7.9	53.0	3.6	111	—
10.0	$\pm 10\%$	-25	542	57	7.9	50.0	4.0	106	—
12.0	$\pm 10\%$	-26	543	36	2.5	35.0	3.0	122	—
15.0	$\pm 10\%$	-27	544	38	2.5	30.0	3.4	115	—
18.0	$\pm 10\%$	-28	545	40	2.5	26.0	3.8	108	—
22.0	$\pm 10\%$	-29	546	40	2.5	24.0	4.9	96	—
27.0	$\pm 10\%$	-30	547	40	2.5	21.0	5.8	88	—
33.0	$\pm 10\%$	-31	548	41	2.5	20.0	6.5	83	—
39.0	$\pm 10\%$	-32	549	42	2.5	19.0	7.9	75	—
47.0	$\pm 10\%$	-33	550	44	2.5	16.0	9.3	69	—
56.0	$\pm 10\%$	-34	551	44	2.5	15.0	11.0	64	—
68.0	$\pm 10\%$	-35	552	45	2.5	13.0	12.0	61	—
82.0	$\pm 10\%$	-36	553	45	2.5	11.0	13.0	59	—
100.0	$\pm 10\%$	-37	554	40	2.5	10.5	16.8	51	—
Ferrite Core									
120.0	$\pm 10\%$	MS21427	LT10K	31	.79	13.0	5.8	88	27
150.0	$\pm 10\%$	-2	555	33	.79	12.0	7.9	75	24
180.0	$\pm 10\%$	-3	557	33	.79	11.0	9.4	69	22
220.0	$\pm 10\%$	-4	558	35	.79	10.0	11.0	64	20
270.0	$\pm 10\%$	-5	559	37	.79	9.0	12.0	61	18
330.0	$\pm 10\%$	-6	560	40	.79	8.0	16.0	53	16
390.0	$\pm 10\%$	-7	561	38	.79	7.8	21.0	46	14
470.0	$\pm 10\%$	-8	562	36	.79	7.5	24.0	43	13
560.0	$\pm 10\%$	-9	563	36	.79	7.0	28.0	40	12

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

***Incremental Current: The minimum typical current at which the inductance will be decreased by 5% from its initial zero DC value.

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ standard. $\pm 5\%$ available.

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

Dielectric Withstanding Voltage: 200 VAC per MIL-STD-202, Method 301 (sea level).

Percent Coupling: 3% maximum per MIL-C-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°.

Weight: IMS-2 = .30 grams maximum.

MATERIAL SPECIFICATIONS

Encapsulant: Epoxy.

Standard Terminal: #24 AWG tinned copper.

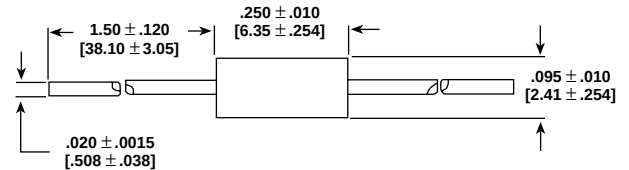
TEST EQUIPMENT*

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

*Test procedures per MIL-C-15305.

DIMENSIONAL CONFIGURATIONS

[Numbers in brackets indicate millimeters]

**INDUCTANCE RANGE AND MILITARY STANDARD**

INDUCTANCE RANGE		CLASSIFICATION		MATERIAL		MILITARY STANDARD
FROM	TO	GRADE	CLASS	CORE	SHIELD	
.10μH	100μH	1	A	Powdered Iron	Powdered Iron	MS21426
120μH	560μH	1	A	Ferrite	Ferrite	MS21427

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-C-15305
Low Temperature Storage	—	MIL-C-15305
Resistance to Soldering Heat	Test Condition A	MIL-STD-202, Method 210
Resistance to Solvents	—	MIL-STD-202, Method 215

HOW TO ORDER

IMS-2	10μH	±10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

HOW TO ORDER - 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.