

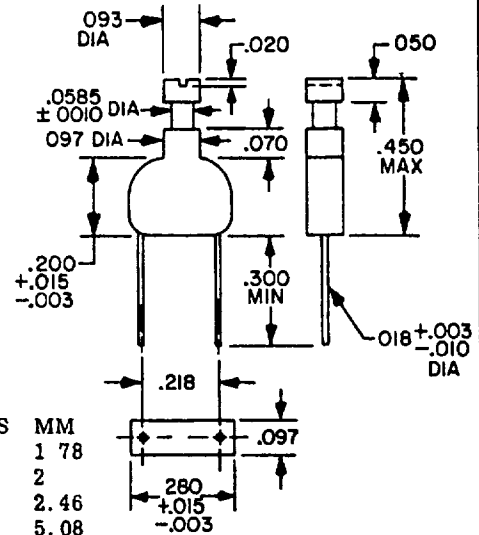
User activities: Army MU
Navy AS SH, MC, OS
Air Force 19

Reviewer activities: Army MI, SG
Navy EC, OS
Air Force 11, 17, 99
DSA - ES

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

RATINGS

Style	LT11
Grade	2
Class	A
Operating temperature range	-55°C to +105°C
Ambient temperature	90°C max
Temperature rise	15°C max
Power dissipation	225 mW max
Dielectric withstanding voltages:	
Sea level	1,000 Vrms min
Reduced barometric pressure	200 Vrms min
Terminal pull	2 lb. min
Tuning torque	.005 - .2 in. oz.
Stop torque	.2 in. oz. max
Altitude	70,000 feet
Weight	25 gram max



INCHES	MM	INCHES	MM
.001	.03	.070	1.78
.003	.08	.093	2
.010	.25	.097	2.46
.015	.38	.200	5.08
.018	.46	.218	5.54
.020	.51	.280	7.11
.050	1.27	.300	7.62
.0585	1.49	.450	11.43

ELECTRICAL CHARACTERISTICS (initial)

Dash No. 1/	Type Designation	Inductance		Test Freq. MHz	Q Min. at L Max.	SRF Min. MHz	DC Res. at 25°C Max. Ohms	Rated Current Max. mA DC
		L Max. μ H	L Min. μ H					
-1	LT11V077	.025	.020	200	50	1,000	.02	250
-2	078	.051	.035	100	40	700	.03	250
-3	079	.076	.040	100	40	615	.10	250
-4	080	.10	.07	25	30	500	.3	250
-5	081	.15	.11	25	30	420	.35	200
-6	082	.22	.16	25	30	400	.4	180
-7	083	.27	.19	25	30	400	.5	180
-8	084	.33	.165	25	30	320	.6	140
-9	085	.47	.34	25	30	290	.65	100
-10	086	.56	.40	25	30	250	.75	100
-11	087	.68	.50	25	30	240	.85	100
-12	088	.82	.59	25	30	180	.9	100
-13	089	1.0	.50	7.9	25	140	.4	125
-14	090	1.5	1.0	7.9	25	135	.8	100
-15	091	2.2	1.2	7.9	25	100	1.4	80
-16	092	2.7	1.95	7.9	25	60	1.6	75
-17	093	3.3	2.2	7.9	25	60	1.8	65
-18	094	4.7	2.5	7.9	25	50	2.2	60
-19	095	5.8	2.9	7.9	25	38	2.8	58
-20	096	6.8	3.4	7.9	25	36	3.0	55
-21	LT11V097	8.2	4.6	7.9	25	25	3.0	50

1/ The dash number added to the MS Military Standard number constitutes the MS part number for example MS53233-1.

P A Army - EL	International	TITLE COILS, RADIO FREQUENCY, ENCAPSULATED, VARIABLE, MICRO-MINIATURE, (IRON CORE), TYPES LT11V077 TO LT11V097, INCL.	MILITARY STANDARD
Other Cust AF - 85 Navy - EC			MS 53233
Procurement Specification MIL-C-15305	SUPERSEDES		PAGE 1 OF 3

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5950-0505-5

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5950

ELECTRICAL CHARACTERISTICS (final)				
Inspection group	Allowable variation from initial measurements			
	Inductance	DCR	SRF	Q
	Percent		Percent	Percent
Qualification				
Group II	±5	---	---	-10
Group III	±5	±(2% + .001 ohm)	-5	-10
Group IV	±5	±(2% + .001 ohm)	-10	-10
Quality Conformance Inspection				
Group C				
Subgroup I	±5	---	---	-10
Subgroup II	±5	±(2% + .001 ohm)	-10	-10
Subgroup III	±5	±(2% + .001 ohm)	-5	-10

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± .005 (.13 mm).
4. Lead material -1 through -12 is .018 (.46 mm) diameter copper
-13 through -21 is .018 (.46 mm) diameter gold-plated Kovar
5. The test fixture in the diagram following shall be used for electrical measurements. Inductance values are effective inductance as indicated on a HP260A, HP190A, or equivalent Q meter, when tested in the test fixture. Add 5% to Q reading to account for loss of Q in test jig.
6. Polarization during the moisture resistance test is not applicable
7. Shock, specified pulse, method 213, test condition I, is applicable
8. Coils are held rigidly by the body during vibration and mechanical shock testing.
9. Barometric pressure test (test condition C) is applicable
10. Resistance to soldering heat test, per MIL-STD-202, method 216, test condition B, is applicable.
11. For dielectric withstanding voltage, barometric pressure and insulation resistance units shall be placed on flat metal plate with leads insulated from surface. Measurement of dielectric withstanding voltage, barometric pressure and insulation resistance shall be between the leads of the coil connected together and the metal plate.
12. Screw core assembly shall be set at maximum specified inductance value indicated in the electrical characteristics table (initial) prior to all inspection tests. This setting shall not be changed until electrical characteristics (final) measurements are performed.
13. The marking shall be as specified in MIL-C-15305 except that the marking shall be on the unit package or container.
14. This standard takes precedence over the procurement specification referenced herein.
15. Referenced document shall be the issue in effect on the date of invitation for bid.

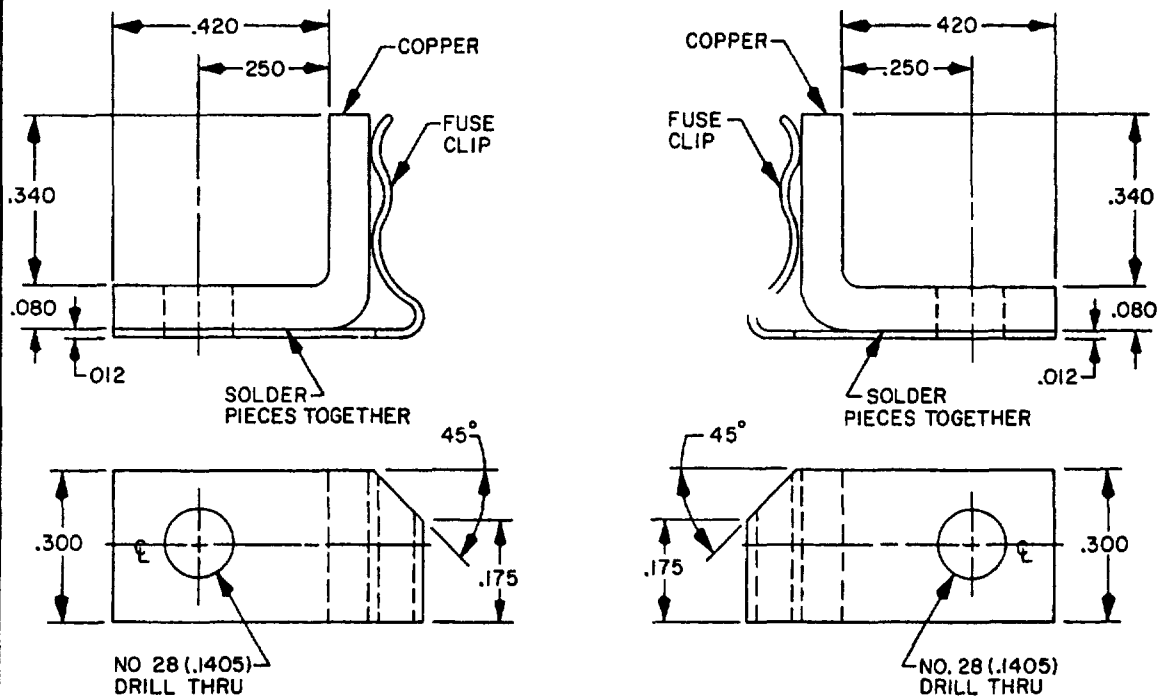
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P A Army - EL	International interest	TITLE COILS, RADIO FREQUENCY, ENCAPSULATED, VARIABLE, MICRO- MINIATURE, (IRON CORE), TYPES LT11V077 TO LT11V097, INCL.	MILITARY STANDARD
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Procurement Specification MIL-C-15305		SUPERSEDES	PAGE 2 OF 3

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TEST FIXTURES FOR ELECTRICAL MEASUREMENTS



SIDE B

INCHES	MM
.012	.30
.080	2.03
.1405	3.57
.175	4.45
.250	6.35
.300	7.62
.340	8.64
.420	10.67

SIDE A

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P A Army - EL

International
interest

Other Cust

AF - 85

Navy - EC

Procurement Specification

MIL-C-15305

TITLE COILS, RADIO FREQUENCY,
ENCAPSULATED, VARIABLE, MICRO-
MINIATURE, (IRON CORE), TYPES
LT11V077 TO LT11V097, INCL.

SUPERSEDES

MILITARY STANDARD

MS 532 33

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