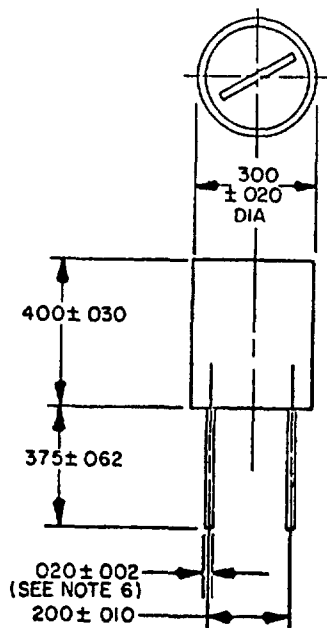


FED SUP CLASS  
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Inches	mm
.002	0 05
.010	0 25
.020	0 51
.030	0 76
.062	1 57
.200	5 08
.300	7 62
.375	9 53
400	10 16

	<u>Ratings</u>
Style	LT10
Grade	1
Class	A
Operating temperature range	-55°C to +105°C
Ambient temperature	90°C max
Temperature rise	15°C max
Working voltage	300 Vdc
Percent coupling	3 percent max
Dielectric withstanding voltage	
Sea level	840 Vrms min
Reduced barometric pressure	630 Vrms min
Terminal pull	3 pounds min
Tuning torque	0.40 to 6 in-oz. (D)
Weight	1.5 grams max
Altitude	70,000 FT.

(D) DENOTES CHANGE

P A Air Force 85 Other Cust EC ER	International Interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, SUBMINIATURE, IRON CORE, MAGNETICALLY SHIELDED, TYPES LT10V174 TO LT10V209 INCL AND LT10V247 TO LT10V258 INCL.	MILITARY STANDARD
			MS21381
Procurement Specification MIL-C-15305		SUPERSEDES MS21381(USAF)	PAGE 1 OF 5

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 when applicable.

Review activities  
Army - MI  
Navy -  
Air Force - 11, 17, 99  
DLA - ES

User activities  
A - mv -  
Navy -  
Air Force - 19

APPROVED 11 JAN 1973 REVISED (A) 7 NOV 1973 (B) 17 AUG 1979 (C) 4 FEB 80 (D) 8 MAY 87

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5950

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Approved 11 JAN 1973

REVIEWED 11 JAN 1973

REVISED 11 JAN 1973

APPROVED 11 JAN 1973

For changes see page 1

DLA - ES

Air Force - 11, 17, 99

DLA - ES

Review activities

Army - MI

Navy -

Air Force - 11, 17, 99

DLA - ES

User activities

Army -

Navy -

Air Force -

DLA -

## Electrical characteristics (initial)

Dash No. 1/ 2/	Type designation	Inductance tuning range			Test frequency (L&Q)	Q min at L nom	Minimum self resonant frequency at L nom	DC resistance (max)	Rated DC current (max)
		L nom	L min	L max					
		<u>uH</u>	<u>uH</u>	<u>uH</u>	<u>MHz</u>		<u>MHz</u>	<u>ohms</u>	<u>mA</u>
-1	LT10V174	.10	.095	.105	25.0	45	250	.030	1510
-74	LT10V247	.11	.105	.116	25.0	45	250	.030	1480
-2	LT10V175	.12	.114	.126	25.0	45	250	.030	1450
-75	LT10V248	.13	.124	.137	25.0	45	250	.030	1420
-3	LT10V176	.15	.143	.158	25.0	45	250	.030	1400
-76	LT10V249	.16	.152	.168	25.0	45	250	.035	1380
-4	LT10V177	.18	.171	.189	25.0	45	250	.035	1370
-77	LT10V250	.20	.190	.210	25.0	45	250	.035	1350
-5	LT10V178	.22	.209	.231	25.0	45	250	.035	1340
-78	LT10V251	.24	.228	.252	25.0	45	250	.040	1320
-6	LT10V179	.27	.257	.284	25.0	51	250	.040	1300
-79	LT10V252	.30	.285	.315	25.0	51	250	.040	1280
-7	LT10V180	.33	.314	.347	25.0	51	250	.040	1260
-80	LT10V253	.36	.342	.378	25.0	51	250	.045	1250
-8	LT10V181	.39	.371	.410	25.0	51	210	.045	1240
-81	LT10V254	.43	.409	.452	25.0	51	200	.045	1220
-9	LT10V182	.47	.447	.494	25.0	51	184	.045	1200
-82	LT10V255	.51	.485	.536	25.0	51	180	.050	1180
-10	LT10V183	.56	.532	.588	25.0	51	176	.050	1160
-83	LT10V256	.62	.589	.651	25.0	51	163	.055	1130
-11	LT10V184	.68	.646	.714	25.0	51	152	.055	1100
-84	LT10V257	.75	.713	.788	25.0	51	147	.060	1070
-12	LT10V185	.82	.779	.861	25.0	55	144	.060	1040
-85	LT10V258	.91	.865	.956	25.0	55	136	.070	1010
-13	LT10V186	1.00	.950	1.050	25.0	55	128	.070	986
-14	LT10V187	1.2	1.08	1.32	7.9	58	136	.085	968
-15	LT10V188	1.5	1.35	1.65	7.9	64	124	.100	893
-16	LT10V189	1.8	1.62	1.98	7.9	74	108	.110	853
-17	LT10V190	2.2	1.98	2.42	7.9	71	96	.120	817
-18	LT10V191	2.7	2.43	2.97	7.9	71	83.2	.125	800
-19	LT10V192	3.3	2.97	3.63	7.9	58	74.4	.165	696
-20	LT10V193	3.9	3.51	4.29	7.9	58	69.6	.180	659

P A  
Air Force - 85  
Other Cust  
EC  
ER

International  
Interest

TITLE COILS, RADIO FREQUENCY, MOLDED  
VARIABLE, SUBMINIATURE, IRON CORE,  
MAGNETICALLY SHIELDED, TYPES LT10V174  
TO LT10V209 INCL. AND LT10V247 TO  
LT10V258 INCL.

MILITARY STANDARD

MS21381

Procurement Specification  
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SUPERSEDES:  
MS21381 (USAF)

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DLA - ES

Review activities

Army - MI

User activities

Air Force - 11, 17, 99

Air Force - 19

Electrical characteristics (initial) Continued

Dash No 1/ 2/	Type design- nation	Inductance tuning range			Test Fre- quency (L&Q)	Q min at L nom	Minimum self reso- nant fre- quency at L nom	DC resis- tance (max)	Rated DC cur- rent (max)
		L nom	L min	L max					
		uH	uH	uH	MHz		MHz	ohms	mA
-21	LT10V194	4 7	4 23	5.17	7.9	61	63.2	245	571
-22	LT10V195	5.6	5 04	6.16	7.9	61	57.6	265	550
-23	LT10V196	6.8	6.12	7.46	7.9	55	50.4	.330	493
-24	LT10V197	8.2	7 38	9.02	7.9	61	48.0	.460	417
-25	LT10V198	10	9 00	11.0	7.9	58	43.2	.640	359
-26	LT10V199	12	10.8	13.2	2.5	77	29.6	800	316
-27	LT10V200	15	13.5	16.5	2.5	77	23.0	865	301
-28	LT10V201	18	16.2	19.8	2.5	74	19.0	.940	292
-29	LT10V202	22	19.8	24.2	2.5	80	17.0	1.03	267
-30	LT10V203	27	24.3	29.7	2.5	74	16.5	1.18	243
-31	LT10V204	33	29.7	36.3	2.5	77	14.9	1.30	231
-32	LT10V205	39	35.1	42.9	2.5	77	14.1	1.41	223
-33	LT10V206	47	42.3	51.7	2.5	71	11.9	1.61	203
-34	LT10V207	56	50.4	61.6	2.5	74	11.1	2.08	191
-35	LT10V208	68	61.2	74.8	2.5	67	10.3	2.20	185
-36	LT10V209	82	73.8	90.2	2.5	67	9.35	2.42	174

- 1/ The dash number added to the MS military standard number constitutes the MS part number, for example MS21381-1.
- 2/ See note 9

REVISED ① For changes see page 1

APPROVED 11 JAN 1973

P A Air Force - 85 Other Cust EC ER	International Interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, SUBMINIATURE, IRON CORE, MAGNETICALLY SHIELDED, TYPES LT10V174 TO LT10V209 INCL AND LT10V247 TO LT10V258 INCL.	MILITARY STANDARD  <b>MS21381</b>
Procurement Specification MIL-C-15305	SUPERSEDES MS21381(USAF)	PAGE 3 OF 5	

FED SUP CLASS  
5950

Army -  
Navy -  
Air Force - 19

User activities

Army - MI  
Navy -  
Air Force - 11, 17, 99  
DLA - ES

Review activities

## Electrical Characteristics (Final)

Inspection Group	Allowable variation from initial measurement		Allowable % from specified minimum value in Electrical Characteristics (Initial) table.	
	Inductance Percent	DC resistance	Self-resonant frequency	Q
Qualification Inspection				
Group II	± 2	----	----	-10
Group III	± 5	± (3% + .001 ohm)	-8	-10
Group IV	± 5	± (2% + .001 ohm)	-10	-10
Quality Conformance Inspection				
Group C				
Subgroup I	± 2	----	----	-10
Subgroup II	± 5	± (2% + .001 ohm)	-10	-10
Subgroup III	± 5	± (3% + .001 ohm)	-8	-10

1/ Initial inductance shall consist of testing the variable for the inductance range; equal to or less than MIN.L and equal to or more than MAX. L.

The variable shall then be set to the nominal inductance.

The remaining applicable electrical characteristics shall be read without readjusting the unit.

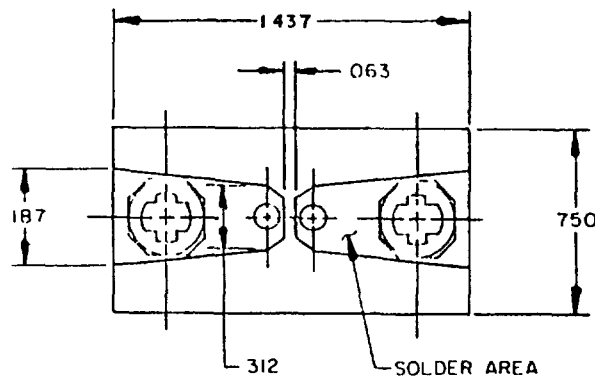
Allowable variation from initial inductance shall be the percent change between nominal inductance and the final inductance reading.

The variable shall not be reset or adjusted between initial and final inductance tests.

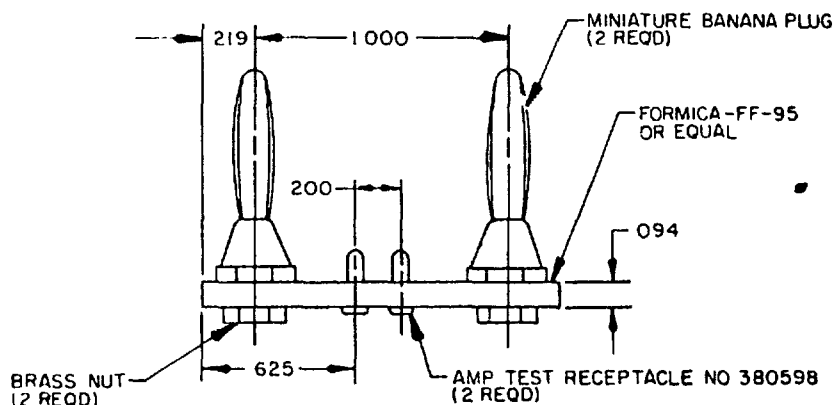
APPROVED 11 JAN 1973 REVISED (D) For changes see page 1

P.A Air Force - 85 Other Cust EC BR	International Interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, SUBMINIATURE, IRON CORE, MAGNETICALLY SHIELDED, TYPES LT10V174 TO LT10V209 INCL. AND LT10V247 TO LT10V258 INCL.	MILITARY STANDARD
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5950

INCH	mm
063	1.60
094	2.39
187	4.75
200	5.08
219	5.56
312	7.92
625	15.88
750	19.05
1 000	25.40
1 437	36.50

TEST FIXTURE FOR ELECTRICAL MEASUREMENTS

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. These coils are intended to be mounted by the body.
4. Barometric pressure test (test condition C) is applicable.
5. Shock, specified pulse, method 213, test condition I, is applicable.
6. Tinned copper lead wire, AWG No. 24.
7. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
8. Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein.
9. Former MS part numbers MS21381-37 thru MS21381-73 have been superseded by MS21402-1 thru MS21402-37, respectively.
10. Tolerance is  $\pm 0.005$  (0.13 mm).

PA  
Air Force - 85  
Other Cust  
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VARIABLE, SUBMINIATURE, IRON CORE,  
MAGNETICALLY SHIELDED, TYPES LT10V174  
TO LT10V209 INCL. AND LT10V247 TO  
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MILITARY STANDARD

MS21381

Procurement Specification  
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SUPERSEDES

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