

Army MI, ME, EL
Navy AS, CG, MC
Air Force 19

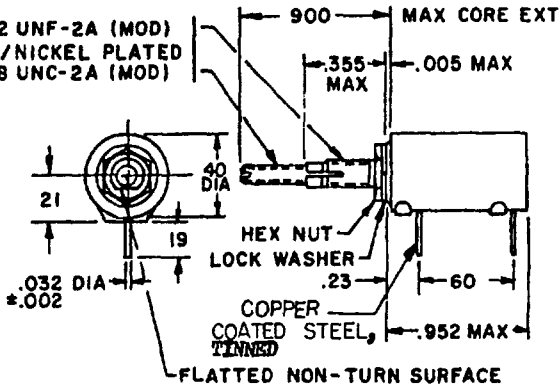
Army MI, MU
Navy EC, OS, SH
Air Force 11, 17, 80
DSA-EP

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 will be made from this document.

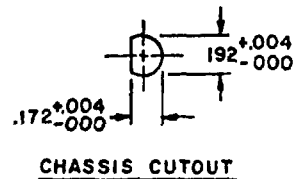
FED. SUP CLASS
5950

RATINGS		LT12
Style	Grade	3
Class	Class	A
Maximum operating temperature		105° C
Temperature rise		15° C
Ambient temperature		90° C
Dielectric withstanding voltage (sea level)		1000 volts rms
Dielectric withstanding voltage (reduced barometric pressure)		200 volts rms
Terminal pull		5 pounds
Operating temperature		-55° to 105° C
Altitude		70,000 feet

.190-32 UNF-2A (MOD)
BRASS/NICKEL PLATED
C99-48 UNC-2A (MOD)



INCHES	MM	INCHES	MM	INCHES	MM
.002	.05	.172	4.37	.355	9.02
.004	.10	.19	4.83	.40	10.16
.005	.13	.192	4.88	.60	15.24
.032	.18	.21	5.33	.900	22.86
.099	2.51	.23	5.84	.952	24.18



ELECTRICAL CHARACTERISTICS (INITIAL)

Dash No 1/	Type designation	Former MS part Number	Former type designation	Tuning range						Min self-resonant frequency at max specified inductance	DC resistance max Ohms	Rated DC current ma
				Inductance min	Q min	Test frequency	Inductance max	Q min	Test frequency			
-32	LT12V032	90546-01	LT10V094	23 µH	90	25 MHz	.40 µH	100	25 MHz	210 MHz	05	1800
-33	LT12V033	90546-02	LT10V095	29 µH	95	25 MHz	.64 µH	110	25 MHz	165 MHz	053	1720
-34	LT12V034	90546-03	LT10V096	37 µH	100	25 MHz	.90 µH	110	25 MHz	140 MHz	06	1850
-35	LT12V035	90546-04	LT10V097	50 µH	105	25 MHz	1.20 µH	95	7.9 MHz	125 MHz	08	1430
-36	LT12V036	90546-05	LT10V098	78 µH	105	25 MHz	1.80 µH	90	7.9 MHz	95 MHz	09	1340
-37	LT12V037	90546-06	LT10V099	1.10 µH	75	7.9 MHz	2.50 µH	65	7.9 MHz	75 MHz	10	1280
-38	LT12V038	90546-07	LT10V100	1.30 µH	65	7.9 MHz	3.60 µH	65	7.9 MHz	68 MHz	23	840
-39	LT12V039	90546-08	LT10V101	2.00 µH	70	7.9 MHz	6.00 µH	75	7.9 MHz	56 MHz	35	680
-40	LT12V040	90546-09	LT10V102	3.00 µH	80	7.9 MHz	9.00 µH	100	7.9 MHz	45 MHz	75	465
-41	LT12V041	90546-10	LT10V103	4.00 µH	80	7.9 MHz	11.00 µH	90	2.5 MHz	39 MHz	1.00	405
-42	LT12V042	90546-11	LT10V104	7.50 µH	80	7.9 MHz	18.00 µH	95	2.5 MHz	32 MHz	1.40	340
-43	LT12V043	90546-12	LT10V105	12.00 µH	70	2.5 MHz	30.00 µH	100	2.5 MHz	21 MHz	1.50	315
-44	LT12V044	90546-13	LT10V106	15.00 µH	70	2.5 MHz	44.00 µH	90	2.5 MHz	16 MHz	2.00	274
-45	LT12V045	90546-14	LT10V107	25.00 µH	75	2.5 MHz	65.00 µH	90	2.5 MHz	13 MHz	2.20	261
-46	LT12V046	90546-15	LT10V108	35.00 µH	80	2.5 MHz	90.00 µH	85	2.5 MHz	10 MHz	3.00	223
-47	LT12V047	90546-16	LT10V109	55.00 µH	80	2.5 MHz	130.00 µH	85	790 kHz	8 MHz	3.80	198
-48	LT12V048	90546-17	LT10V110	80.00 µH	70	2.5 MHz	200.00 µH	85	790 kHz	6.8 MHz	4.20	189
-49	LT12V049	90546-18	LT10V111	120.00 µH	70	790 kHz	290.00 µH	85	790 kHz	5.6 MHz	4.50	182
-50	LT12V050	90546-19	LT10V112	200.00 µH	60	790 kHz	430.00 µH	75	790 kHz	4.5 MHz	6.00	158
-51	LT12V051	90546-20	LT10V113	300.00 µH	50	790 kHz	620.00 µH	70	790 kHz	3.2 MHz	13.00	107
-52	LT12V052	90546-21	LT10V114	400.00 µH	50	790 kHz	1.00 mH	60	790 kHz	2.4 MHz	17.00	94
-53	LT12V053	90546-22	LT10V115	600.00 µH	35	790 kHz	1.70 mH	50	250 kHz	1.9 MHz	19.00	82
-54	LT12V054	90546-23	LT10V116	1.05 mH	35	250 kHz	2.70 mH	50	250 kHz	1.28 MHz	23.00	74
-55	LT12V055	90546-24	LT10V117	1.70 mH	30	250 kHz	4.00 mH	40	250 kHz	1.10 MHz	33.00	62
-56	LT12V056	90546-25	LT10V118	2.50 mH	30	250 kHz	6.00 mH	35	250 kHz	840 kHz	41.00	56
-57	LT12V057	90546-26	LT10V119	3.70 mH	30	250 kHz	9.00 mH	35	250 kHz	700 kHz	61.00	46
-58	LT12V058	90546-27	LT10V120	5.60 mH	30	250 kHz	13.00 mH	30	79 kHz	600 kHz	81.00	40
-59	LT12V059	90546-28	LT10V121	8.60 mH	30	250 kHz	22.00 mH	35	79 kHz	570 kHz	120.00	32
-60	LT12V060	90546-29	LT10V122	13.00 mH	25	79 kHz	30.00 mH	35	79 kHz	280 kHz	170.00	27
-61	LT12V061	90546-30	LT10V123	21.00 mH	20	79 kHz	47.00 mH	25	79 kHz	210 kHz	230.00	23
-62	LT12V062	90546-31	LT10V124	35.00 µH	20	79 kHz	70.00 mH	25	79 kHz	140 kHz	345.00	19

1/ The dash number added to the MS military standard number constitutes the MS part number, for example, MS 90546-32

(A) Entire standard revised

P A	EL	International interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, FERRITE CORE (PRINTED CIRCUIT MT'G) TYPES LT12V032 TO LT12V062, INCLUSIVE	MILITARY STANDARD
Other Cust	EC			MS 90546
	80			
Procurement Specification MIL-C-15305			SUPERSEDES:	PAGE 1 OF 3

DD FORM 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5950-0450

APPROVED 24 March 1967 REVISED 27 Nov 1973

User activities. Army, MI, ME, EL
 Navy AS, CG, MC
 Air Force 19
 Reviewer activities. Army, MI, MU
 Navy EC, OS, SH
 Air Force 11, 17, 80
 DSA-EP

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

FED SUP CLASS
5950

Electrical characteristics (Final)				
Inspection Group	Allowable variation from initial measurement		Allowable % from specified minimum value in Electrical Characteristics (Initial) table	
	Inductance	DC resistance	Self-resonant frequency	Q
	Percent			
Qualification Inspection				
Group II	± 2	---	--	-10
Group III	± 5	±(2% + .001 ohm)	-5	-15
Group IV	± 5	±(2% + .001 ohm)	-5	-10
Quality Conformance Inspection				
Group C				
Subgroup I	± 2	---	--	-10
Subgroup II	± 5	±(2% + .001 ohm)	-5	-10
Subgroup III	± 5	±(2% + .001 ohm)	-5	-10

NOTES.

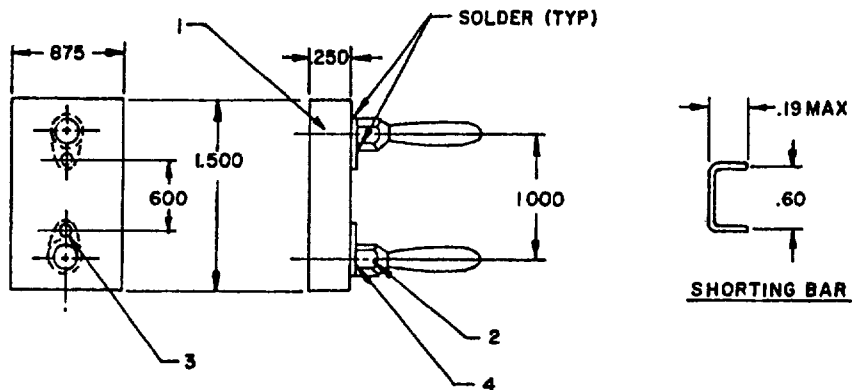
- Core shall be set at the maximum specified inductance value indicated in the electrical characteristics (Initial) table prior to all inspection tests. This core setting shall not be changed until electrical characteristics (Final) measurements are performed.
- Temperature rise and terminal pull tests are applicable.
- Barometric pressure (test condition C) is applicable.
- Operating torque shall be a maximum of 6 ounce-inches and a minimum of 0.5 ounce-inch for tuning coil.
- The test fixture in the diagram below shall be used for electrical measurements. The effective inductance shall be determined for all coils whenever this measurement is specified. Allowance of approximately .03 μ H shall be determined for the internal inductance of the Q-meter and test fixture when measuring inductance value of 10 μ H or less. The shorting bar shall be made of solid copper wire (AWG #20) bent to conform to the body configuration of the coil under test (see diagram below).
- Approximate weight:
 Dash number 32-42 ----5.8 grams
 43-52 ----6.6 grams
 53-62 ----7.0 grams
- Dimensions are in inches.
- Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
- Unless otherwise specified, tolerances are .XX±.02 and .XXX±.005.
- For design feature purposes, this standard takes precedence over procurement document referenced herein.
- Referenced document shall be of the issue in effect on date of invitations for bid.
- Shock specified pulse method 213, test condition I, is applicable. Coil shall be mounted by its mounting stud and securely fastened with mounting hardware for vibration and shock testing.
- Terminal material shall be in accordance with QQ-W-346, Type I.

APPROVED 24 March 1967
 REVISED 27 Nov 1973

P.A EL	International Interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, FERRITE CORE (PRINTED CIRCUIT MT'G) TYPES LT12V032 TO LT12V062, INCLUSIVE	MILITARY STANDARD
Other Cust EC 80			MS 90546
Procurement Specification MIL-C-15305	SUPERSEDES		PAGE 2 OF 3

FED SUP CLASS
5950

TEST FIXTURE FOR ELECTRICAL MEASUREMENTS



Item	Description	Qty
1	Lucite block	1
2	#103 Banana plug or equivalent	2
3	Nugent PS-402-60 or equal	2
4	Copper lug	2

INCHES	MM
.19	4.83
.250	6.35
.600	15.24
.875	22.23
1.000	25.40
1.500	38.10

P A	EL	International Interest	TITLE COILS, RADIO FREQUENCY, MOLDED VARIABLE, FERRITE CORE (PRINTED CIRCUIT MT'G) TYPE LT12V032 TO LT12V062, INCLUSIVE	MILITARY STANDARD
Other Cust	EC 80			MS 90546
Procurement Specification MIL-C-15305			SUPERSEDES:	PAGE 3 OF 3

DD FORM 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE
1 SEP 63

Reviewer activities: Army MI, MU; Navy EC, OS, SH; Air Force 11, 17, 80; DSA-EP
 User activities: Army MI, ME, EL; Navy AS, CG, MC; Air Force 19

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.

APPROVED 24 March 1967 REVISED 27 Nov 1973

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No. 22-R255
INSTRUCTIONS: This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.		
SPECIFICATION MS90546 COILS, RADIO FREQUENCY, MOLDED VARIABLE, FERRITE CORE (PRINTED CIRCUIT MT'G) TYPE LT12V032 TO LT12V062 INCLUSIVE		
ORGANIZATION		
CITY AND STATE	CONTRACT NUMBER	
MATERIAL PROCURED UNDER A <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT		
1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? A. GIVE PARAGRAPH NUMBER AND WORDING.		
B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES		
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID		
3. IS THE SPECIFICATION RESTRICTIVE? <input type="checkbox"/> YES <input type="checkbox"/> NO (If "yes", in what way?)		
4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)		
SUBMITTED BY (Printed or typed name and activity - Optional)		DATE

DD FORM 1426
1 JAN 66

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

ESC-FM 1068-68

FOLD

Department of the Army
Headquarters
U.S. Army Electronics Command
Fort Monmouth, New Jersey 07703

POSTAGE AND FEES PAID

OFFICIAL BUSINESS

Commanding General
U.S. Army Electronics Command
ATTN: AMSEL-RD-ED
Fort Monmouth, New Jersey 07703

FOLD