

INCH-POUND

MS75083D  
16 February 1995  
SUPERSEDING  
MS75083C  
7 December 1993

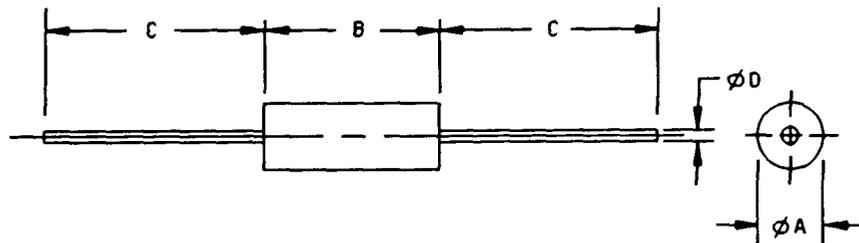
MILITARY SPECIFICATION SHEET

COILS, RADIO FREQUENCY, MOLDED, FIXED (PHENOLIC CORE),  
TYPES LT4K339 TO LT4K351, INCLUSIVE

Inactive for new design after 4 September 1985.  
For new design, use MIL-C-39010/8.

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this  
specification sheet and the issue of the following specification listed in that  
issue of the Department of Defense Index of Specifications and Standards (DODISS)  
specified in the solicitation: MIL-C-15305.



Ltr	Dimensions are in inches with metric equivalents (mm) in parentheses	
	Minimum	Maximum
$\phi A$	.085 (2.16)	.105 (2.67)
B	.240 (6.10)	.260 (6.60)
C	1.250 (31.75)	1.626 (41.30)
$\phi D$	.0185 (0.470)	.0215 (0.546)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 1. Dimensions and configuration.

(D) denotes changes

MS75083D

REQUIREMENTS:

Design, construction, and physical dimensions: See figure 1.

Style: LT4.

Grade: 1.

Class: B.

Ⓓ Weight: 0.0106 ounce maximum.

Operating temperature range: -55°C to +125°C.

Ambient temperature: 90°C.

Terminal pull: 5 pounds.

Altitude: 70,000 feet with a test voltage of 300 V rms.

Dielectric withstanding voltage (sea level): Method 301 of MIL-STD-202; test voltage of 1,000 V rms.

Barometric pressure (reduced): Method 105, test condition C, of MIL-STD-202.

Electrical characteristics: See tables I and II.

Inductance: See table I.

Q values: See table I.

Self-resonant frequency: See table I.

DC resistance: See table I.

Part or Identifying Number (PIN): MS75083- (dash number from table I).

TABLE I. Electrical characteristics (initial) and dash numbers.

Dash number	Type designation	Inductance ±10% μH	Q minimum	Test frequency (L and Q) (MHz)	Self-resonant frequency minimum (MHz)	DC resistance (25°C) maximum (ohms)	Rated dc current (mA) 1/
-1	LT4K339	.10	40	25.0	680	.08	1,350
-2	LT4K340	.12	40	25.0	640	.09	1,270
-3	LT4K341	.15	38	25.0	600	.10	1,200
-4	LT4K342	.18	35	25.0	550	.12	1,105
-5	LT4K343	.22	33	25.0	510	.14	1,025
-6	LT4K344	.27	33	25.0	430	.16	960
-7	LT4K345	.33	30	25.0	410	.22	815
-8	LT4K346	.39	30	25.0	365	.30	700
-9	LT4K347	.47	30	25.0	330	.35	650
-10	LT4K348	.56	30	25.0	300	.50	545
-11	LT4K349	.68	28	25.0	275	.60	495
-12	LT4K350	.82	28	25.0	250	.85	415
-13	LT4K351	1.00	25	25.0	230	1.00	385

1/ For the overload test, direct current shall be used. The value of this current shall be 1.5 times the rated dc current.

TABLE II. Electrical characteristics (final). 1/

Inspection group	Allowable variation from initial measurement		Allowable percent 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	-15
Quality conformance inspection group C				
Subgroup I	±2	---	---	-10
Subgroup II	±5	±(2% +.001 ohm)	-10	-15
Subgroup III	±5	±(3% +.001 ohm)	-8	-10

Ⓓ 1/ Test fixture allowance of +.01  $\mu$ H shall be added to all change in inductance limits  $\pm$ ( \_ percent +.01  $\mu$ H).

Application notes:

1. The temperature-rise, terminal-twist tests are applicable.
2. The polarizing voltage during the moisture-resistance test is applied with the positive lead connected to the coil terminals tied together, and the negative lead connected to the metal strap.
3. These coils are intended to be supported by their leads.
4. Solderable/weldable lead wire AWG 24.

CONCLUDING MATERIAL

Custodians:

Army - ER  
Navy - EC  
Air Force - 85

Review activities:

Army - AR, ME, MI  
Navy - AS, CG, MC, OS, SH  
Air Force - 17, 19, 99  
DLA - ES

Preparing activity:  
Army - ER

Agent:  
DLA - ES

(Project 5950-0861)