

INCH-POUND

MS75085D
16 February 1995
SUPERSEDING
MS75085C
4 September 1985

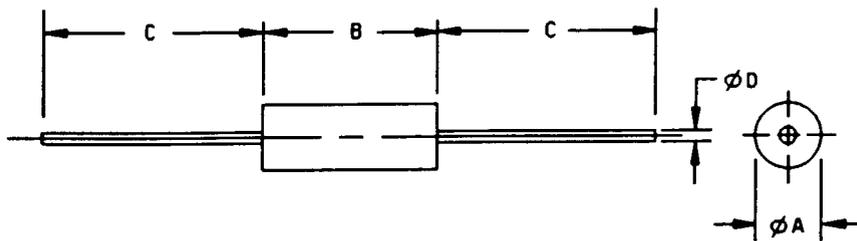
MILITARY SPECIFICATION SHEET

COILS, RADIO FREQUENCY, MOLDED, FIXED (FERRITE CORE),
TYPES LT10K078 TO LT10K096, INCLUSIVE

Inactive for new design after 4 September 1985.
For new design, use MIL-C-39010/10.

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
ϕA	.085 (2.16)	.105 (2.67)
B	.240 (6.10)	.260 (6.60)
C	1.250 (31.75)	1.626 (41.30)
ϕD	.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

MS75085D

REQUIREMENTS:

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

Style: LT10.
Grade: 1.
Class: A.

Ⓓ Weight: 0.0106 ounce maximum.

Operating temperature range: -55°C to +105°C.

Ambient temperature: 90°C.

Temperature rise: 15°C.

Terminal pull: 5 pounds, is not applicable in inspection table VI, group B of MIL-C-15305.

Altitude: 70,000 feet.

Shock, specified pulse: MIL-STD-202, method 213, test condition I, is applicable.

Dielectric withstanding voltage (sea level): MIL-STD-202, method 301, test voltage of 1,000 V rms for a minimum of 60 seconds

Barometric pressure (reduced): MIL-STD-202, method 105, test condition C, test voltage of 200 V rms for a minimum of 60 seconds.

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): MS75085-(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	LT10K078	33	45	2.5	24	3.4	130
-2	LT10K079	39	45	2.5	22	3.6	125
-3	LT10K080	47	45	2.5	20	4.5	110
-4	LT10K081	56	45	2.5	18	5.7	100
-5	LT10K082	68	50	2.5	15	6.7	92
-6	LT10K083	82	50	2.5	14	7.3	88
-7	LT10K084	100	50	2.5	13	8	84
-8	LT10K085	120	30	.79	12	13	66
-9	LT10K086	150	30	.79	11	15	61
-10	LT10K087	180	30	.79	10	17	57
-11	LT10K088	220	30	.79	9	21	52
-12	LT10K089	270	30	.79	8	25	47
-13	LT10K090	330	30	.79	7	28	45
-14	LT10K091	390	30	.79	6.5	35	40
-15	LT10K092	470	30	.79	6	42	36
-16	LT10K093	560	30	.79	5	46	35
-17	LT10K094	680	30	.79	4	60	30
-18	LT10K095	820	30	.79	3.8	65	29
-19	LT10K096	1000	30	.79	3.4	72	28

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	±10	±(5% +.001 ohm)	-15	-20
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	±10	±(5% +.001 ohm)	-15	-20

- Ⓓ 1/ Test fixture allowance of $+0.01 \mu\text{H}$ shall be added to all change in inductance limits $\pm(_ \text{percent} +.01 \mu\text{H})$.

Application notes:

1. After the overload test is performed, a period of 24 hours shall elapse prior to taking electrical characteristics (final) measurements.
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. DC resistance shall be the last measurement taken in the electrical characteristics test sequence.
4. These coils are intended to be supported by their leads.
5. 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 5950-0863)