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INCH-POUND

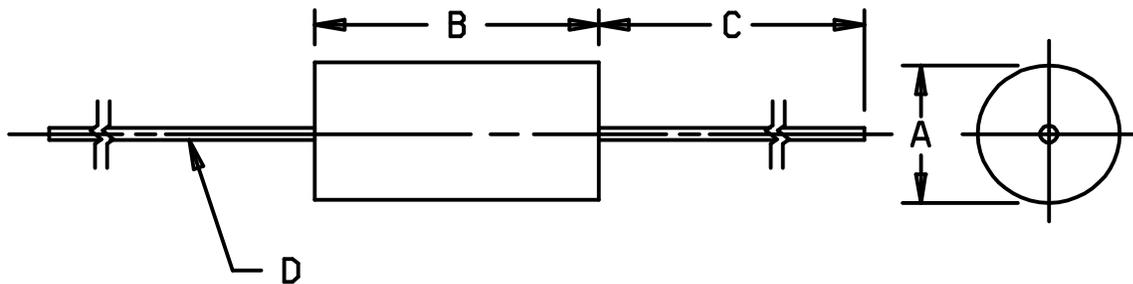
MIL-PRF-39010/5E
 27 August 1997
 SUPERSEDING
 MIL-C-39010/5D
 4 January 1994

PERFORMANCE SPECIFICATION SHEET

COILS, FIXED, RADIO FREQUENCY, MOLDED, SUBMINIATURE
 (POWDERED IRON CORE), ESTABLISHED RELIABILITY AND
 NONESTABLISHED RELIABILITY

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 MIL-PRF-39010.



Letter	Dimensions are in inches with metric equivalents (mm) in parentheses	
	Minimum	Maximum
A	.157 (3.99)	.219 (5.56)
B	.407 (10.34)	.469 (11.91)
C	1.250 (31.75)	1.626 (41.30)
D	.023 (0.58)	.027 (0.69)

NOTES:

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

FIGURE 1. Dimensions and configuration.

MIL-PRF-39010/5E

Interface and physical dimensions: See figure 1.

Material: Powdered iron core.

Weight: 0.03 ounce maximum.

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

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

Barometric pressure: Method 105 of MIL-STD-202, test condition C, 70,000 feet with a test voltage of 200 V rms.

Electrical characteristics: See table I and table II.

Inductance: See table I.

Inductance tolerance: See table I.

Q values: See table I.

Self-resonant frequency: See table I.

DC resistance: See table I.

Temperature rise: 15°C.

Terminal pull: 5 pounds.

Part or Identifying Number (PIN): M39010/05 (dash number from table I).

Supersession data: This specification supersedes MS75101 dated 4 September 1985.

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

MIL-PRF-39010/5E

Dash number <u>1/</u>	Inductance μH	Inductance tolerance ± percent	Q minimu m	Test frequency (MHz)	Self-resonant frequency minimum (MHz)	DC resistance (25°C) maximum (ohms)	Rated dc current (mA) <u>2/</u>
A3R0**	3.00	5	30	7.9	70	0.140	945
A3R3**	3.30	5, 10	30	7.9	70	0.140	945
A3R6**	3.60	5	30	7.9	65	0.155	870
A3R9**	3.90	5, 10	30	7.9	65	0.155	870
A4R3**	4.30	5	30	7.9	60	0.210	745
A4R7**	4.70	5, 10	30	7.9	60	0.210	745
A5R1**	5.10	5	30	7.9	50	0.280	645
A5R6**	5.60	5, 10	30	7.9	50	0.280	645
A6R2**	6.20	5	30	7.9	50	0.375	560
A6R8**	6.80	5, 10	30	7.9	50	0.375	560
A7R5**	7.50	5	30	7.9	48	0.440	520
A8R2**	8.20	5, 10	30	7.9	48	0.440	520
A9R1**	9.10	5	30	7.9	42	0.605	440
A100**	10.0	5, 10	30	7.9	42	0.605	440
A110**	11.0	5	30	2.5	36	1.05	335
A120**	12.0	5, 10	50	2.5	36	.05	335
A130**	13.0	5	50	2.5	30	1.20	310
A150**	15.0	5, 10	55	2.5	30	1.20	310
A160**	16.0	5	55	2.5	30	1.95	245
A180**	18.0	5, 10	60	2.5	30	1.95	245
A200**	20.0	5	60	2.5	24	2.20	230
A220**	22.0	5, 10	60	2.5	24	2.20	230
A240**	24.0	5	60	2.5	22	2.75	205
A270**	27.0	5, 10	65	2.5	22	2.75	205

1/ The complete dash number will include two additional letters (indicated by **). The first additional letter will indicate the inductance tolerance and the second additional letter will indicate the product level (e.g., C, M, P, R, S) and will be added to the end of the dash number.

2/ The rated dc current is based on 90°C ambient temperature with a 15°C rise.

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 IV	±5	±(3% +.001ohm)	<u>2/</u>	-10
Group V	±5	±(2% +.001ohm)	<u>2/</u>	-15
Quality conformance inspection Group B				
Subgroup 1	±5	±(2% +.001ohm)	<u>2/</u>	-15
Subgroup 3	±2			-10
Subgroup 4	±5	±(3% +.001ohm)	<u>2/</u>	-10

1/ Test fixture allowance of +.01 μH shall be added to all change in inductance limits ±(_percent +.01 μH).

2/ The self-resonant frequency shall be not less than the value specified in table I.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR
 Navy - EC
 Air Force - 85

Preparing activity:

Army - CR

Agent:

DLA - CC

Review activities:

Army - AR, CR4, MI
 Navy - AS, CG, MC, OS, SH
 Air Force - 17, 19, 99
 DLA - CC

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