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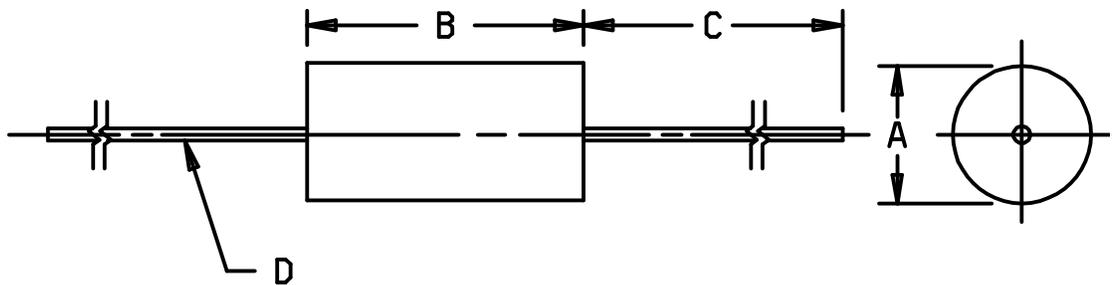
INCH-POUND  
MIL-PRF-39010/7E  
27 August 1997  
SUPERSEDING  
MIL-C-39010/7D  
4 January 1994

PERFORMANCE SPECIFICATION SHEET

COILS, FIXED, RADIO FREQUENCY, MOLDED, MICROMINIATURE  
(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	.146 (3.71)	.166 (4.22)
B	.365 (9.27)	.385 (9.78)
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

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REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Material: 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): M39010/07 (dash number from table I).

Supersession data: This specification supersedes MS14046 dated 16 September 1985.

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TABLE I. Electrical characteristics (initial) and dash numbers

Dash number <u>1/</u>	Inductance $\mu$ H	Inductance tolerance $\pm$ percent	Q minimum	Test frequency (MHz)	Self- resonant frequency minimum (MHz)	DC resistance (25°C) maximum (ohms)	Rated dc current (mA) <u>2/</u>
A5R1**	5.1	5	45	7.9	60	0.32	495
A5R6**	5.6	5, 10	45	7.9	60	0.32	495
A6R2**	6.2	5	45	7.9	55	0.50	395
A6R8**	6.8	5, 10	50	7.9	55	0.50	395
A7R5**	7.5	5	50	7.9	50	0.60	360
A8R2**	8.2	5, 10	50	7.9	50	0.60	360
A9R1**	9.1	5	50	7.9	45	0.90	290
A100**	10.0	5, 10	55	7.9	45	0.90	290
A110**	11.0	5	55	2.5	42	1.10	265
A120**	12.0	5, 10	65	2.5	42	1.10	265
A130**	13.0	5	65	2.5	40	1.40	240
A150**	15.0	5, 10	65	2.5	40	1.40	240
A160**	16.0	5	65	2.5	34	2.25	185
A180**	18.0	5, 10	75	2.5	34	2.25	185
A200**	20.0	5	75	2.5	30	2.50	175
A220**	22.0	5, 10	75	2.5	30	2.50	175
A240**	24.0	5	60	2.5	25	2.60	170
A270**	27.0	5, 10	60	2.5	25	2.60	170
A300**	30.0	5	60	2.5	19	3.00	165
A330**	33.0	5, 10	65	2.5	19	3.00	165

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

1/ Test fixture allowance of +.01µH 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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