

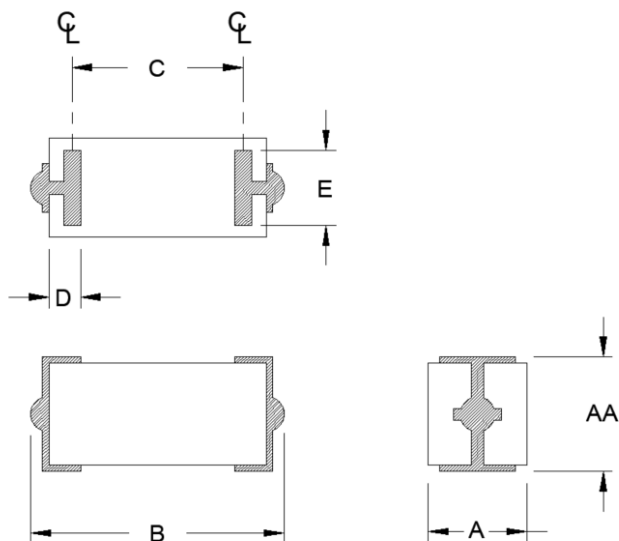
# PERFORMANCE SPECIFICATION SHEET

## COILS, RADIO FREQUENCY, CHIP, FIXED, FERRITE CORE

Inactive for new design after  
November 22, 2019

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

The requirements for acquiring the products described herein shall consist of this specification and MIL-PRF-83446.



Letter	Dimensions	
	Minimum	Maximum
A	.105 (2.67)	.125 (3.18)
AA	.125 (3.18)	.145 (3.68)
B	.300 (7.62)	.320 (8.13)
C	.230 (5.84)	.260 (6.60)
D	.020 (0.51)	.040 (1.02)
E	.075 (1.91)	.095 (2.41)

### NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.
4. Dimensions AA and B are measured over the terminals.

FIGURE 1. Dimensions and configuration.



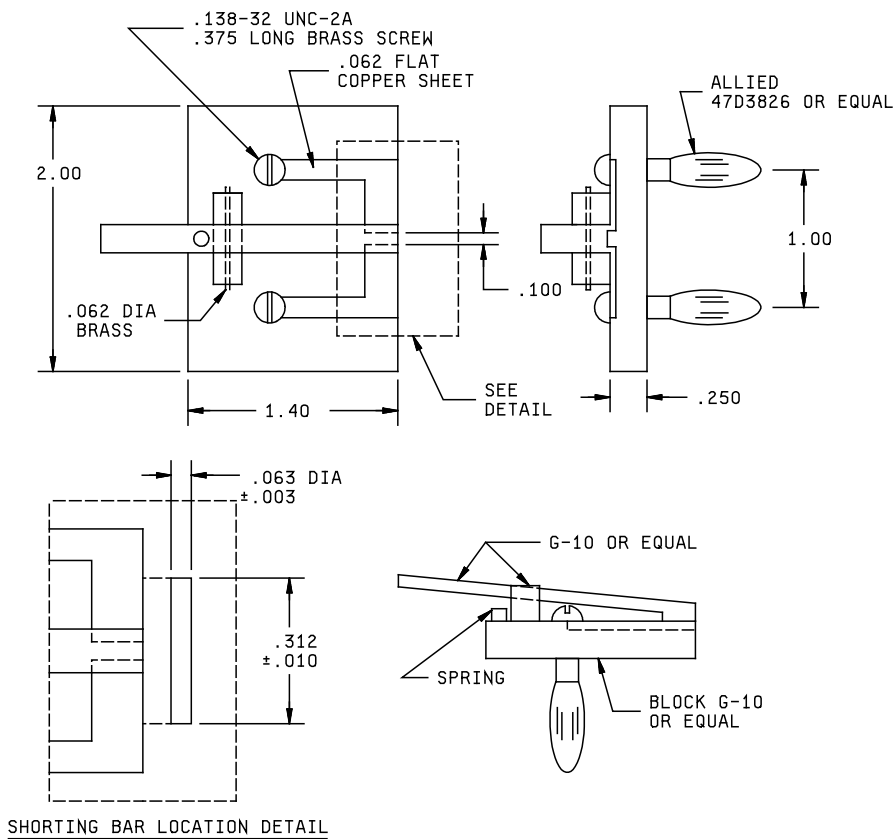
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w/AMENDMENT 1

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

Dash number	Inductance ±10% (μH)	Q (min)	Test Frequency (L and Q) (MHz)	Self resonant frequency (min) MHz	DC resistance (max) ohms	Current rating (max) mA
-01	33	35	2.5	24	3.40	130
-02	39	35	2.5	22	3.60	125
-03	47	35	2.5	20	4.50	110
-04	56	35	2.5	18	5.70	100
-05	68	35	2.5	15	6.70	92
-06	82	35	2.5	14	7.30	88
-07	100	35	2.5	13	8.0	84
-08	120	30	.79	12	13.0	66
-09	150	30	.79	11	15.0	61
-10	180	30	.79	10	17.0	57
-11	220	30	.79	9	21.0	52
-12	270	30	.79	8	25.0	47
-13	330	30	.79	7	28.0	45
-14	390	30	.79	6.5	35.0	40
-15	470	30	.79	6	42.0	36
-16	560	30	.79	5	46.0	35
-17	680	30	.79	4.2	60.0	30
-18	820	30	.79	3.8	65.0	29
-19	1000	30	.79	3.4	72.0	28

TABLE II. Electrical characteristics (final).

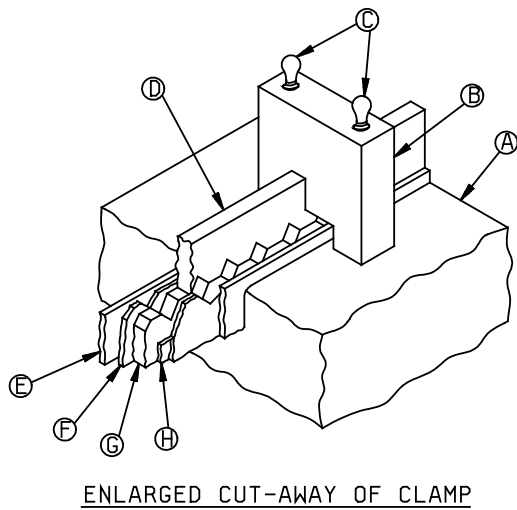
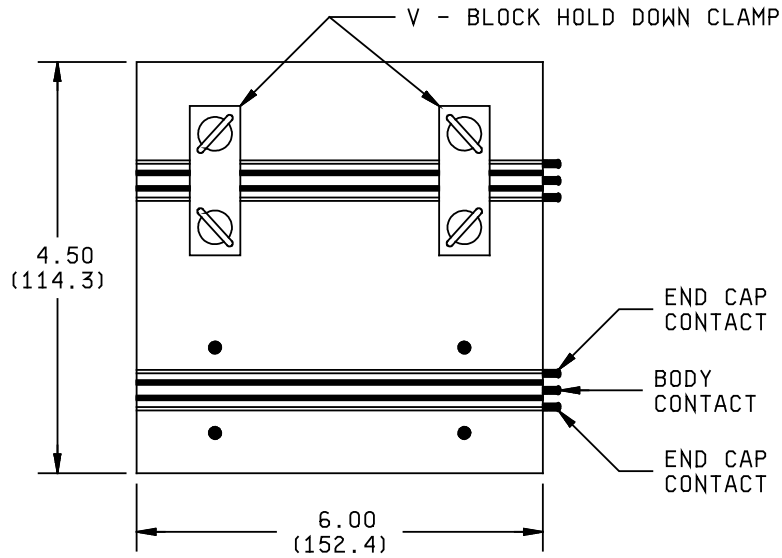
Inspection group	Allowable variation from initial measurements			
	Inductance (Percent)	DC resistance	Self-resonant frequency (Percent)	Q (Percent)
Qualification inspection				
Group II	±10	±5% (+.001 ohm)	-15	-20
Group IV	±10	±5% (+.001 ohm)	-15	-20
Group V	±5	---	---	-15
Conformance inspection group C				
Subgroup II	±5	±2% (+.001 ohm)	-10	-15
Subgroup IV	±10	±5% (+.001 ohm)	-15	-20



NOTES:

1. Dimensions are in inches.
2. Shorting bar material is brass.
3. The total fixture and residual inductance is approximately .049  $\mu\text{H}$  (for reference only).

FIGURE 2. General test fixture, (TF-397).



Legend	
LTR	Description
A	G-10 base
B	Upper V-block hold-down clamp
C	Clamp screws
D	Upper V-block (body contact)
E	End cap contact retaining wall
F	End cap contact V-block (in contact with E)
G	Lower V-block (body contact)
H	G-10 insulators (separating G from F/E)

NOTES:

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FIGURE 3. Test fixture for insulation resistance, dielectric withstanding voltage and barometric pressure.

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

Bond strength: Force 2 pounds.

Weight: 0.30 gram, maximum.

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

Temperature rise (at 90°C): +15°C.

Maximum operating temperature: +105°C.

Altitude: 70,000 feet.

Dielectric withstanding voltage: MIL-STD-202-301, test voltage 500 volts rms.

Barometric pressure: MIL-STD-202-105, test condition C, (70,000 feet), test voltage 200 volts rms.

Electrical characteristics (initial): See table I.

Electrical characteristics (final): See table II.

Test fixture: Tests shall be performed using test fixtures shown on figures 2 and 3, or equivalent.

Part Identifying Number (PIN): The part number shall be in the following form.

M83446/25-

04

Sequentially assigned dash  
Numbers (see table I and II)

E

Termination finish  
(see MIL-PRF-83446)

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-PRF-83446, this document references the following:

MIL-STD-202-105  
MIL-STD-202-301

Custodians:  
Army – CR  
Navy - EC  
Air Force – 85  
DLA - CC

Preparing activity:  
DLA – CC  
  
(Project 5950-2019-019)

Review activities:  
Army – MI  
Navy – AS, OS  
Air Force - 19

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.