

NOTE: The document identifier and heading has been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

INCH-POUND

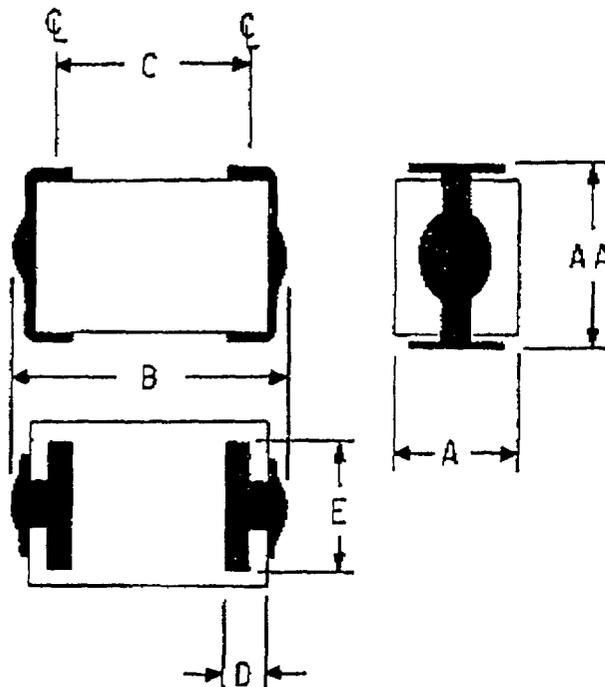
MIL-PRF-83446/21
20 DECEMBER 1988

PERFORMANCE SPECIFICATION SHEET

COILS, RADIO FREQUENCY, CHIP, FIXED, IRON CORE

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-83446.



Letter	Dimensions	
	Minimum	Maximum
A	.075 (1.91)	.095 (2.41)
AA	.095 (2.41)	.115 (2.92)
B	.230 (5.84)	.255 (6.48)
C	.130 (3.30)	.160 (4.06)
D	.040 (1.02)	.060 (1.52)
E	.075 (1.91)	.081 (2.06)

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.

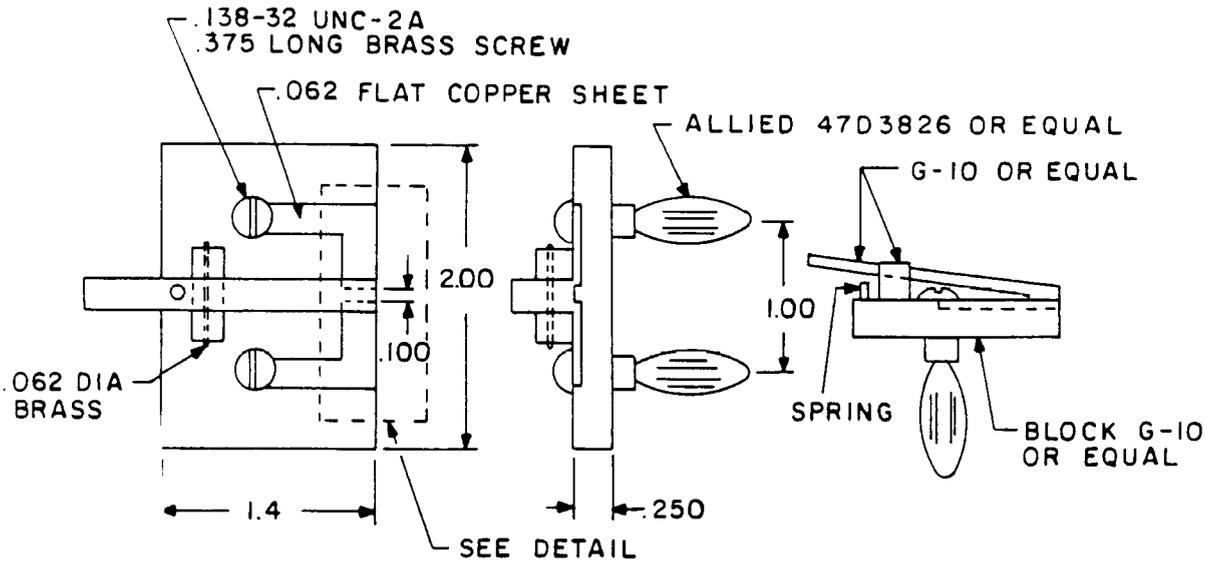
FIGURE 1. Dimensions and configuration.

TABLE I. Electrical characteristics (initial).

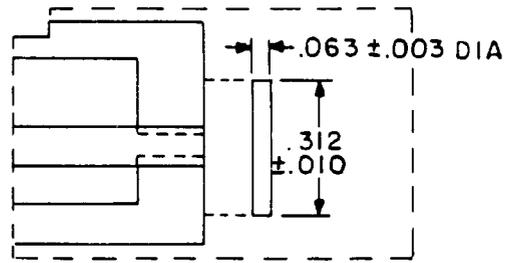
Dash number	Inductance $\mu\text{H} \pm 10\%$	Q (min)	Test frequency (L and Q) MHz	Self resonant frequency MHz (min)	DC resistance ohms (max)	Current rating mA (max)
-01	.56	35	25	240	.19	500
-02	.68	35	25	210	.21	475
-03	.82	35	25	200	.24	444
-04	1.0	35	25	180	.27	418
-05	1.2	25	7.9	160	.32	385
-06	1.5	30	7.9	140	.53	300
-07	1.8	30	7.9	125	.59	283
-08	2.2	30	7.9	120	.76	250
-09	2.7	30	7.9	100	.90	229
-10	3.3	35	7.9	90	1.35	187
-11	3.9	35	7.9	85	1.70	167
-12	4.7	35	7.9	80	2.30	143
-13	5.6	35	7.9	75	3.10	123
-14	6.8	35	7.9	64	3.60	114
-15	8.2	35	7.9	50	4.8	99
-16	10.0	35	7.9	45	5.7	91
-17	12.0	25	2.5	29	3.3	120
-18	15.0	25	2.5	24	3.8	110
-19	18.0	25	2.5	21	4.2	106
-20	22.0	25	2.5	18	4.7	100
-21	27.0	25	2.5	17	5.7	91
-22	33.0	25	2.5	15	6.2	87
-23	39.0	25	2.5	13	8.1	76
-24	47.0	25	2.5	12	9.8	69
-25	56.0	25	2.5	11	12.0	62
-26	68.0	25	2.5	10	13.8	58
-27	82.0	25	2.5	9	19.0	50
-28	100.0	25	2.5	8.9	21.0	47

TABLE II. Electrical characteristics (final).

Inspection group	Allowable percent variation from the initial measurement			
Qualification inspection:	Inductance	Q	Self-resonant frequency	DC resistance
Group II	± 5	-10	-8	± 3 (+.001 ohm)
Group IV	± 5	-10	-10	± 3 (+.001 ohm)
Group V	± 5	-15	---	---
Quality conformance inspection:				
Group C				
Subgroup II	± 5	-15	-10	± 2 (+.001 ohm)
Subgroup IV	± 5	-10	-8	± 3 (+.001 ohm)



Inches	mm
.003	0.08
.010	0.25
.062	1.57
.063	1.60
.100	2.54
.138	3.51
.250	6.35
.312	7.92
.375	9.52
1.000	25.40
1.400	35.56
2.000	50.80

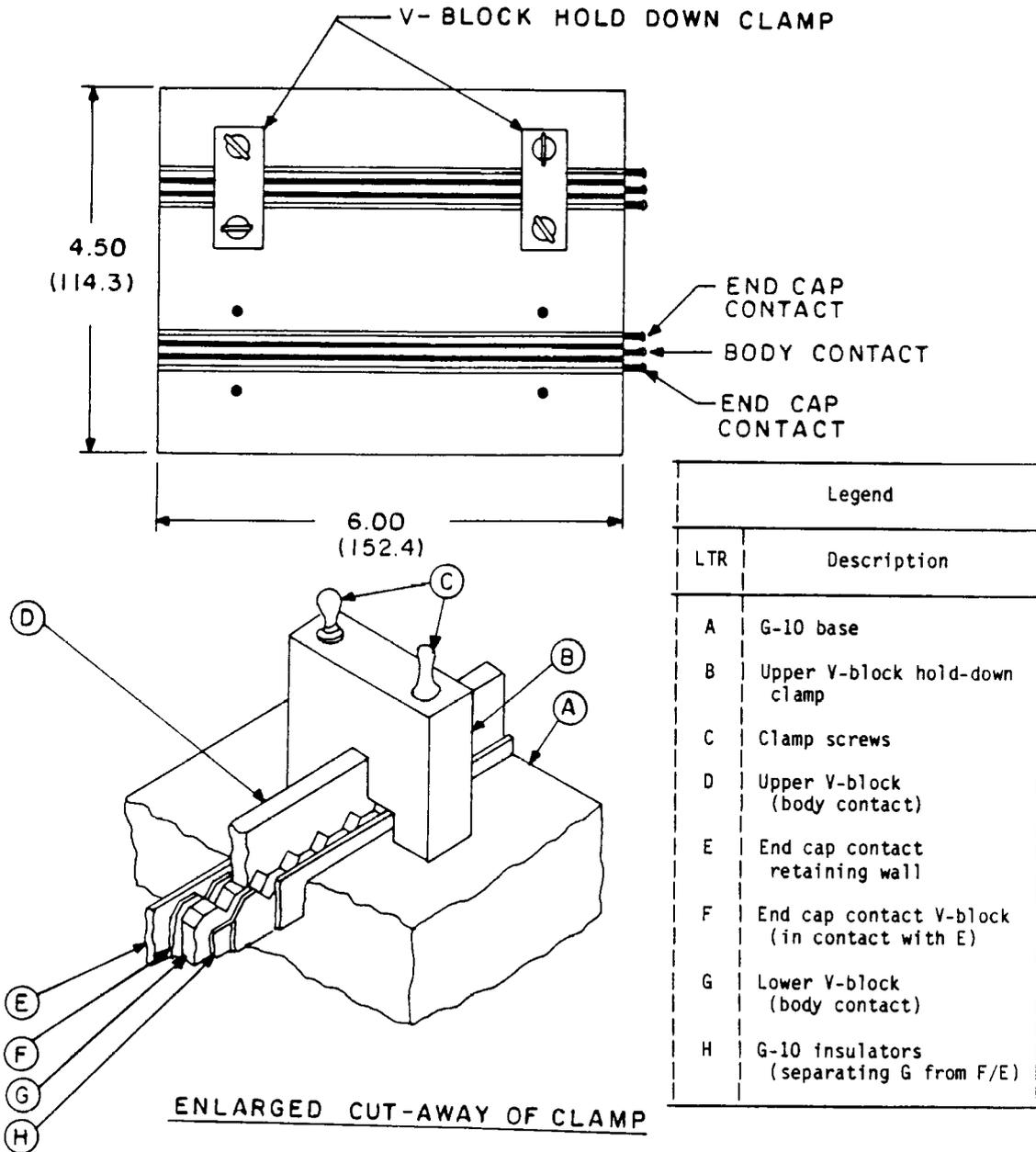


SHORTING BAR LOCATION DETAIL

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Shorting bar material is brass.
4. The total fixture and residual inductance is approximately .049 μ H (for references only).

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



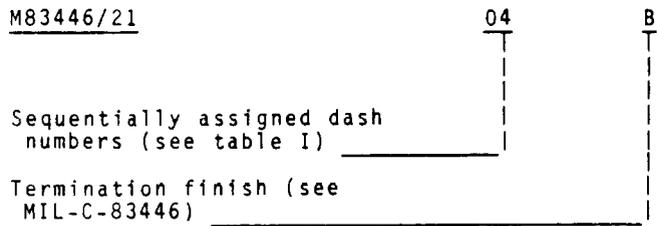
NOTES:

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

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

REQUIREMENTS:

- Dimensions and configuration: See figure 1.
 - Bond strength: Force 2 pounds.
 - Weight: 0.22 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: Method 301 of MIL-STD-202, test voltage 500 volts rms.
 - Barometric pressure: Method 105, test condition C, MIL-STD-202, (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.



CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Army - MI
Navy - AS
Air Force - 19
DLA - ES

User activities:
Navy - OS
Air Force - 11

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0701-02)