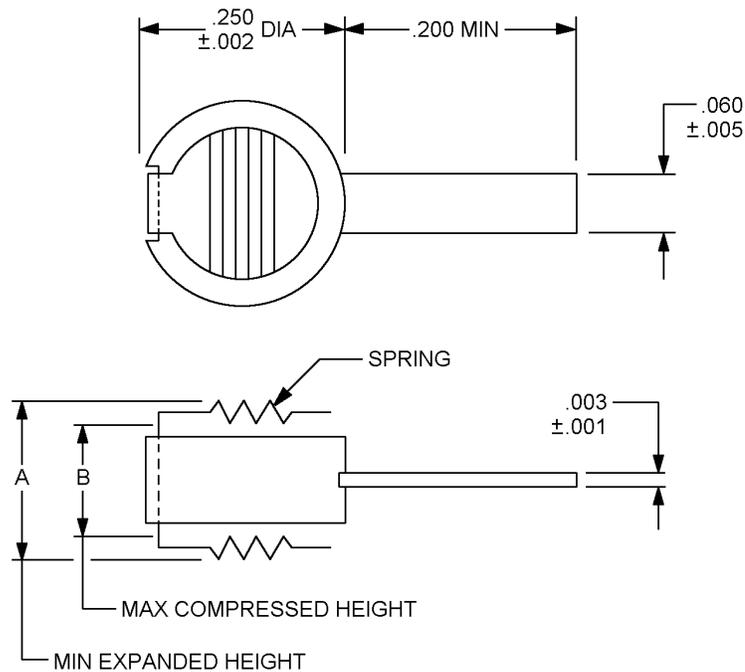


DETAIL SPECIFICATION SHEET

DUMMY LOADS, ELECTRICAL,  
 TYPE XIV (TAB CONTACT), STRIPLINE, MEDIUM POWER

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 and MIL-DTL-39030.



Inches	mm
.001	0.03
.002	0.05
.003	0.08
.005	0.13
.060	1.52
.121	3.07
.140	3.56
.200	5.08
.246	6.25
.250	6.35
.265	6.73

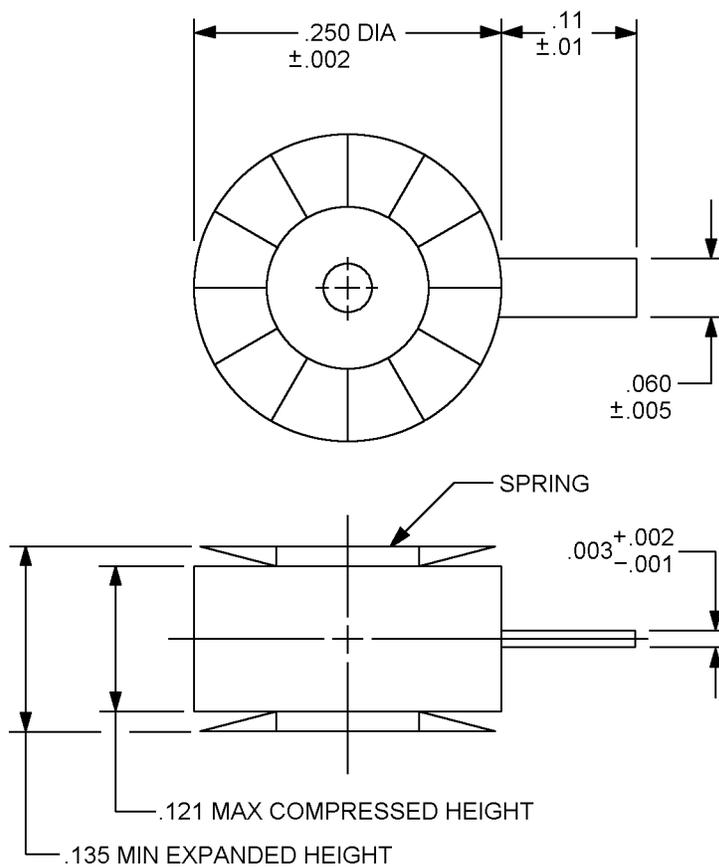
Dash number	A	B
01	.265	.246
02	.140	.121
03	.265	.246

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Part or Identifying Number (PIN).

FIGURE 1. Dimensions and configuration, PINs M39030/21-01, -02 and -03.

MIL-DTL-39030/21A



Inches	mm
.001	0.03
.002	0.05
.003	0.08
.005	0.13
.01	.3
.060	1.52
.11	2.8
.121	3.7
.135	3.43
.250	6.35

NOTES:

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

FIGURE 2. Dimensions and configuration, PIN M39030/21-04.

TABLE I. Dash numbers and characteristics.

Dash number	Operating frequency (GHz)	VSWR (max)	Power handling capability (max)		Nominal characteristic impedance (ohms)	Weight (max) (oz)	Figure number
			Average (watts)	Peak (watts)			
01	DC to 3.0	1.15:1 <u>1/</u>	3	.1K	50	.053	1
02	DC to 12.0	(1.20 + .025f):1 <u>2/</u>	3	.1K	50	.053	1
03	DC to 6.0	(1.10 + .025f):1 <u>2/</u>	3	.1K	50	.021	1
04	DC to 12.4	1.10:1 (DC to 10.0 GHz)  1.25:1 (10.1 to 12.4 GHz)	3 <u>3/</u>	3K <u>3/</u>	50	.021	2

1/ VSWR is specified at 1.8 and 3.0 GHz.

2/ Where "f" is the frequency in GHz.

3/ Input power is derated linearly from 100 at +75°C to 10 percent at +142°C.

#### REQUIREMENTS:

Dimension and configurations: See figures 1 and 2.

Electrical characteristics: See table I.

#### Materials:

Body: Brass in accordance with ASTM B121, ASTM B36, ASTM B16, ASTM B16M, and ASTM B124, ASTM B21 and ASTM B21M, ASTM 124 and ASTM B283, QQ-B-639 or ASTM B36 and ASTM B121.

Finish: Gold plated in accordance with ASTM B488, type 3, grade C, class 1.27 over copper flash.

Tab contact: Brass in accordance with ASTM B121, ASTM B36, ASTM B16, ASTM B16M, and ASTM B124, ASTM B21 and ASTM B21M, ASTM B124 and ASTM B283 or QQ-B-639 (dash numbers 01 thru 03) or beryllium copper in accordance with ASTM B196, ASTM B197 and ASTM B194 (dash number 04).

Finish: The tab shall be a minimum gold thickness of 50 micro inches (1.27 μm) in accordance with ASTM B488, type 3, grade C, class 1.27, over 50 micro inches (1.27 μm) minimum of nickel in accordance with AMS-QQ-N-290, class 1, measured anywhere along the mating surface, for all series.

Spring: Beryllium copper in accordance with ASTM B196, ASTM B197 and ASTM B194.

Finish: Gold plated in accordance with ASTM B488, type 3, grade C, class 1.27.

Weight: See table I.

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Ambient temperature range:

Operating:

Dash numbers 01 thru 04: -55°C to +125°C.

Dash numbers 02 and 03: -65°C to +150°C.

Nonoperating (storage):

Dash numbers 01 and 04: -55°C to +125°C.

Dash numbers 02 and 03: -65°C to +150°C.

Solderability: Method 208 of MIL-STD-202, the following details and exception shall apply:

- a. Number of terminations of each part to be tested: One contact.
- b. Special preparation of terminations: No wiping, cleaning, scraping, or abrasive cleaning of the contact shall be performed.
- c. Depth of immersion: The entire surface of the contact shall be covered.
- d. Method of mounting: The dummy load shall be mounted onto a heat sink.
- e. Examination of terminations: There shall be no evidence of pinholes and blistering.

Note: This test shall be performed after the visual and mechanical inspection in qualification.

PIN: M39030/21-(dash number from 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.

CONCLUDING MATERIAL

Custodians:  
Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 5985-1244-012)

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