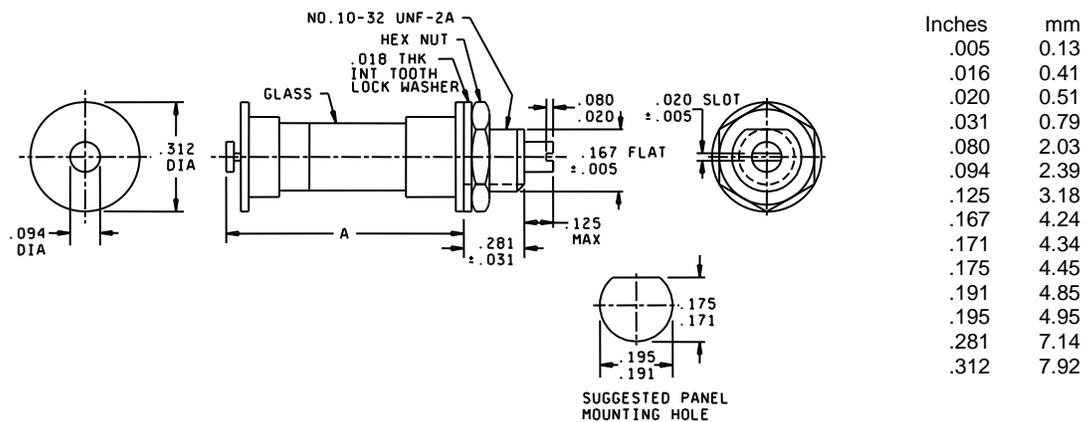


PERFORMANCE SPECIFICATION SHEET

CAPACITORS, VARIABLE (PISTON TYPE,
TUBULAR TRIMMER), STYLE PC39

This specification sheet 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-14409.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± 0.016 .
4. The flat on the mounting bushing shall extend to the mounting surface of the shoulder.
5. The turret cap shall be soldered to the cylinder with high temperature solder having minimum melting point of 232°C.
6. For dimension A see table I.

FIGURE 1. Dimensions and configuration.

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REQUIREMENTS:

Dimensions: See figure 1 and table I.

DC voltage rating: 1,000 volts.

Construction: Sealed glass, see figure 1 and table I.

Capacitance range: See table I.

Insulation resistance (IR): [Method 302 of MIL-STD-202](#), test condition B (500 volts ± 10 percent); not less than 1,000,000 megohms at room ambient temperature and not less than 100,000 megohms at 125°C.

Quality factor (Q): See table I.

Thermal Shock: [Method 107 of MIL-STD-202](#), test condition A, except the step 3 temperature shall be 125°C $\pm 5^\circ\text{C}$.

Immersion: [Method 104 of MIL-STD-202](#), test condition A.

Seal test: Applicable.

Rotational life:

Capacitance change versus rotation: No reversal greater than 2 percent.

TABLE I. Type designation and characteristics.

| Type designation | Capacitance range | | Dimensions ^{1/} A $\pm .031$ (0.79) | Q | Temperature coefficient parts/million/ $^\circ\text{C}$ | Dielectric material |
|------------------|-------------------|-----------|---|-----|--|---------------------|
| | Min | Max | | | | |
| | <u>pF</u> | <u>pF</u> | | | | |
| PC39G160 | 1.0 | 16.0 | .469 (11.91) | 750 | ± 150 | Glass |
| PC39G360 | 1.0 | 36.0 | .703 (17.86) | 550 | ± 150 | Glass |
| PC39G520 | 1.0 | 52.0 | .922 (23.42) | 350 | ± 150 | Glass |
| PC39G750 | 1.0 | 75.0 | 1.172 (29.77) | 250 | ± 150 | Glass |
| PC39G121 | 1.0 | 120.0 | 1.766 (44.86) | 250 | ± 150 | Glass |
| PC39J121 | 1.0 | 120.0 | 1.766 (44.86) | 250 | ± 50 | Glass |

^{1/} Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm. Millimeters are in parentheses.

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Changes from previous issue: The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the last previous issue.

Referenced documents: In addition to [MIL-PRF-14409](#), this document also references [MIL-STD-202](#).

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

Preparing activity:
DLA - CC

(Project 5910-2013-029)

Review activities:
Navy - AS, MC, OS

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>.