

INCH-POUND

MIL-PRF-14409/8B

25 July 2001

SUPERSEDING

MIL-PRF-14409/8A

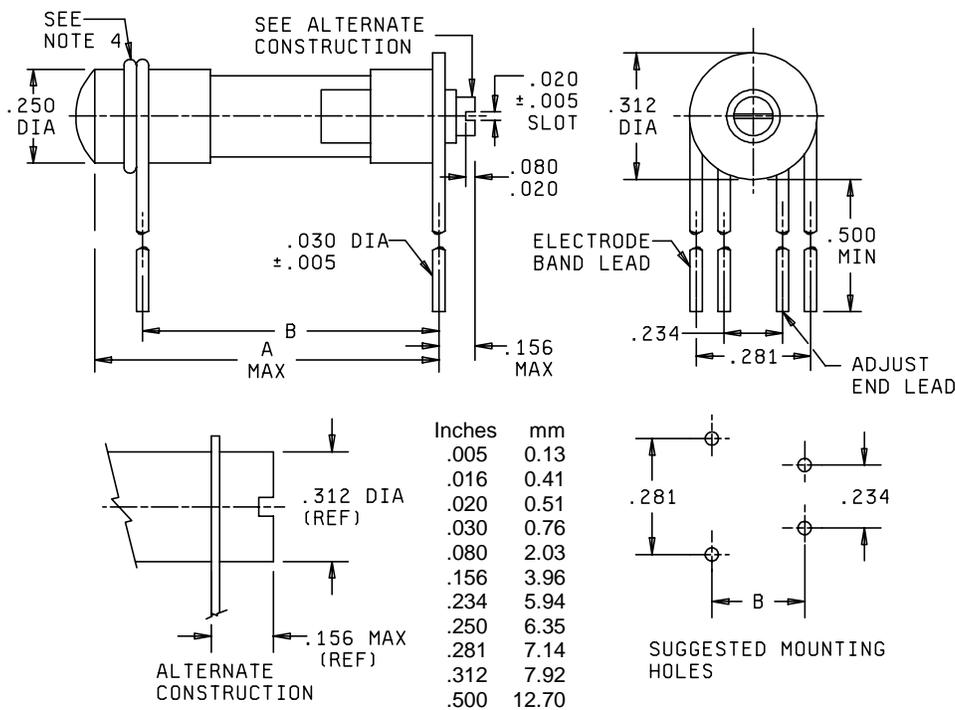
9 June 1969

PERFORMANCE SPECIFICATION SHEET

CAPACITORS, VARIABLE (PISTON TYPE,  
TUBULAR TRIMMER), STYLES PC42 AND PC52

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

The requirements for acquiring the capacitors described herein shall consist of this document and the latest issue of 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  $\pm 0.016$ .
4. There shall be a minimum of one and one-half turns of wire around the body. These turns of wire shall be completely soldered to the body.
5. This style capacitor is designed for printed-circuit mounting.
6. For dimensions A and B see table I.

FIGURE 1. Dimensions and configuration.

MIL-PRF-14409/8B

REQUIREMENTS:

Dimensions: See figure and table I.

DC voltage rating: See table I.

Construction: Sealed glass or quartz, see figure and table I.

Insulation resistance (IR): Method 302 of MIL-STD-202, test condition B (500 volts  $\pm 10$  percent); not less than 1,000,000 megohms, except characteristics J and H shall be not less than 100,000 megohms at 125°C.

Capacitance range: See table I.

Quality factor (Q): See table I.

Temperature cycling: Method 102 of MIL-STD-202, test condition D, except the step 3 temperature shall be 125°C  $\pm 5^\circ\text{C}$  for characteristics J and H, and 150°C  $\pm 5^\circ\text{C}$  for characteristic Q.

Immersion: Method 104 of MIL-STD-202, test condition A.

Seal test: Applicable.

TABLE I. Type designation and characteristics.

Type designation	DC rated voltage	Capacitance range		Dimensions <sup>1/</sup>		Q	Dielectric material	Wire size AWG
		Min	Max	B $\pm .031$ (0.79)	A (max)			
	<u>Volts</u>	<u>pF</u>	<u>pF</u>					
PC42Q1R8	750	0.6	1.8	.500 (12.70)	.656 (16.66)	1,500	Quartz	24
PC42Q5R5	1,250	0.6	5.5	.703 (17.86)	.922 (23.42)	1,500	Quartz	22
PC42Q9R5	1,250	0.6	9.5	1.016 (25.81)	1.359 (34.52)	1,500	Quartz	22
PC42Q160	1,250	0.8	16.0	1.469 (37.31)	1.953 (49.61)	1,500	Quartz	22
PC52J5R5	750	0.8	5.5	.500 (12.70)	.656 (15.88)	1,000	Glass	24
PC52J110	1,250	0.8	11.0	.703 (17.86)	.906 (23.01)	900	Glass	22
PC52H160	1,250	0.8	16.0	.844 (21.44)	1.109 (28.17)	800	Glass	22
PC52H230	1,250	0.8	23.0	1.016 (25.81)	1.359 (34.52)	700	Glass	22
PC52H380	1,250	0.8	38.0	1.469 (37.31)	1.953 (49.61)	500	Glass	22

<sup>1/</sup> 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.

TABLE II. Substitutability data.

Superseded type designation in MIL-C-14409/8	Substitutable type designation in MIL-PRF-14409/8A
PC42J4R5	PC52J5R5
PC42J8R5	PC52J110
PC42H120	PC52H160
PC42H180	PC52H230
PC42H300	PC52H380

MIL-PRF-14409/8B

Custodians:

Army - CR  
Navy - EC  
Air Force - 11

Preparing activity:

DLA - CC

(Project 5910-2111-07)

Review activities:

Navy - AS, MC, OS