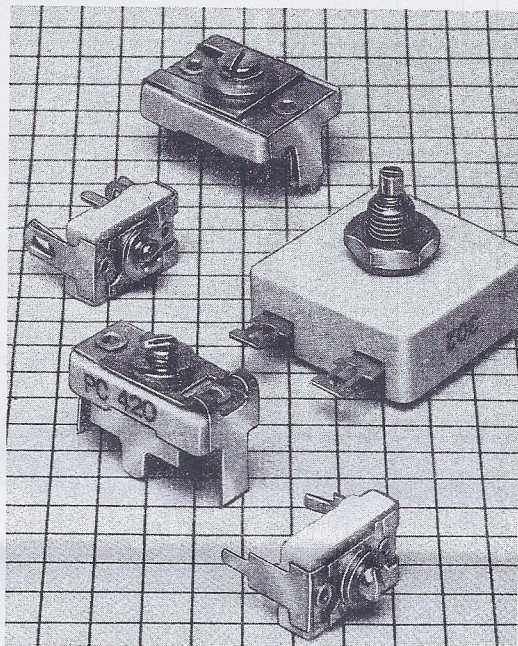


# VARIABLE COMPRESSION MICA TRIMMERS AND PADDERS



## STANDARD TRIMMERS

These variable compression mica trimming capacitors are produced by stacking mica dielectric capacitance units. A capacitor section consists of a thin film of mica between two spring loaded nonferrous metal conducting plates; the stacked units are mounted within a ceramic container, or on a ceramic base. By alternating metal plate, mica film, metal plate, etc., and paralleling these units, any desired capacitance within the physical limitations of the ceramic base can be achieved. A panhead adjusting screw (#2-64, UNS-2) thread for types 40 and 42 and a (#4-64, UNS-2) thread for type 46 is inserted through the center holes of the plates, the mica films, and the threaded bushing. This screw provides variable compression on the formed metal plates, varying the plate separation capacitance.

Arco trimming capacitors are treated for resistance to humidity and for permanence of capacity setting.

The base is made of the lowest loss ceramic dielectric available and the mica is clear India Ruby.

The soldering lugs may be bent in any position without affecting the capacitance setting.

Trimmers shown are standard sizes and capacities.

Standard dimensional adjustment tolerance is  $\pm 1/32"$  or  $\pm 3 1/2^\circ$ , whichever is applicable. Terminals having several lugs can be spotwelded together to prevent separation and flaring.

## Specifications

**OPERATING TEMPERATURE:**  $-35^\circ\text{C}$  to  $\pm 85^\circ\text{C}$ .

**MAXIMUM CAPACITANCE:** Equal to, or greater than the value indicated in the table. When the adjusting screw is at a tight position (with tight being defined as  $1 3/4$  pound-inches). The maximum capacitance will be equal to or greater than the value indicated in the table.

**MINIMUM CAPACITANCE:** Equal to, or less than, the value indicated in the table. When the adjusting screw is rotated 3 turns from tight position, the maximum capacitance will be equal to or less than the value indicated in the table.

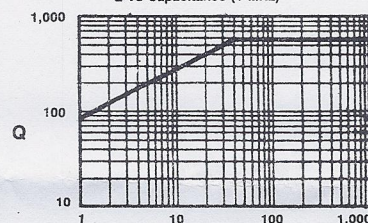
DC VOLTAGE:	Rated Voltage	Test Voltage
Type 30	250	500
Types 40, 42, 46	175	350
Type 30M	500	1000

**INSULATION RESISTANCE** at  $25^\circ\text{C}$ :  
100,000 meg-ohms minimum.

**Q at 1 MHz:** See Q curve, Figure 1.

FIGURE 1

Q vs Capacitance (1 MHz)



CAPACITANCE IN pF

**DISSIPATION FACTOR** at 1 kHz:  $> 1000$  pF Max; D.F. .004 max.

**CAPACITANCE CHANGE WITH TEMPERATURE** at Working Point\*:

TYPE 30:  $= \pm (2.5\% + 0.3 \text{ pF})$

TYPE 40, 42, 46:  $= \pm (1.5\% + 0.3 \text{ pF})$

**CAPACITANCE DRIFT WITH TEMPERATURE** at Working Point\*:

TYPE 30:  $= \pm (2.0\% + 0.5 \text{ pF})$

TYPE 40, 42, 46:  $= \pm (1.5\% + 0.5 \text{ pF})$

\* Screw adjusted to  $1/4$  to  $1/2$  turn from tight.

## TYPE DESIGNATION

ST 0423  
1 2

- 1) Mounting Style  
ST — Standard Bracket Mounting Style  
PC — Printed Circuit Mounting Style  
C — Variation of Printed Circuit Mounting Style
- 2) Indicates shape, construction, dimensions and capacitance.



# Variable Compression Mica Trimmers and Padders

## PC Style Printed Circuit Trimmers

### "PC" TRIMMERS

The Arco trimmer capacitors, Types 40, 42, and 46, have been adapted for printed circuit techniques. Thus the holes in the terminal lugs are eliminated. The printed circuit terminals have greatly increased spring action, allowing the trimmer to be "snapped in" the printed circuit board and held firmly until soldered. The mounting lug portion of the trimmer has also been modified to facilitate positioning and support of the unit. Drawings of the trimmers and mounting layout are available upon request.

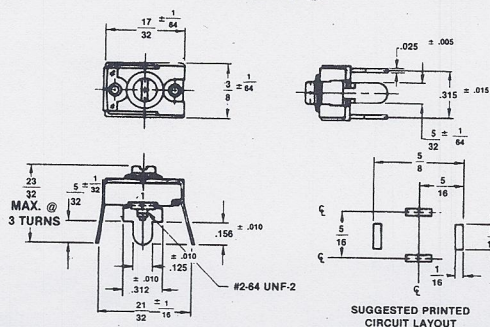
This printed circuit style is designated by the prefix letters "PC" preceding the regular part number. All values listed are available in the PC style.

### "C" TRIMMERS

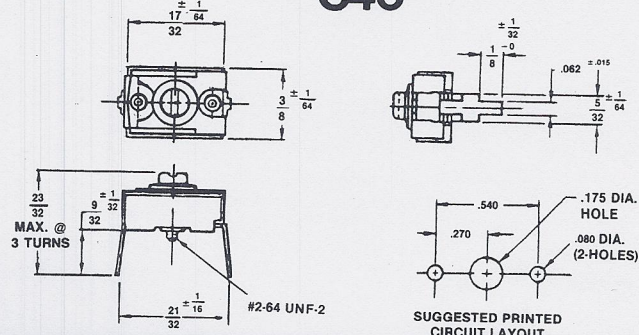
Type "C" trimmer is a "stand off" variation for printed circuit application. Instead of the raised staple, the Type "C" trimmer has .062" width notched terminals to raise the trimmer from the printed circuit board .125 inches. Designate type "C" by preceding the part number with the letter C.

Example: 426 trimmer in Type "C", would become C426.

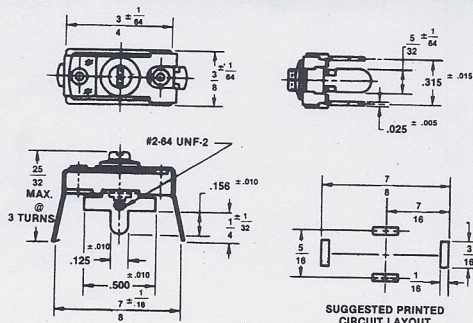
### PC40



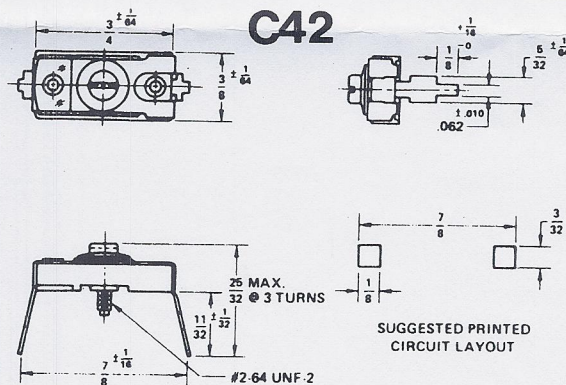
### C40



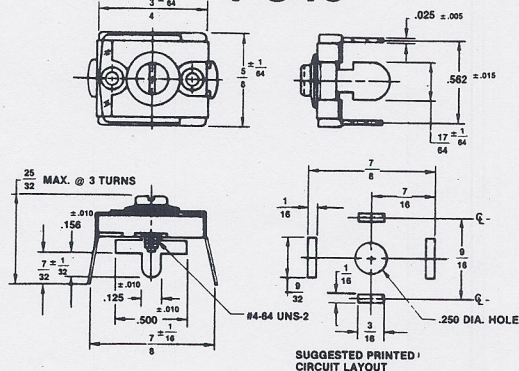
### PC42



### C42



### PC46



### C46

