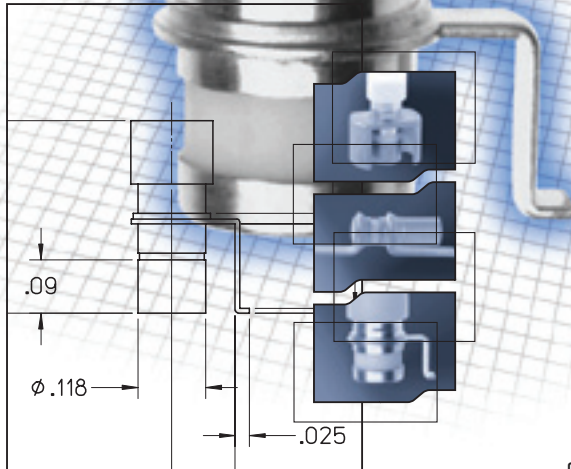


# GIGA- TRIM

Giga-Trims® are tiny trimmer capacitors which provide a straight-forward technique for fine RF and microwave circuits by eliminating time consuming methods of abrasive trimming, cut and try adjustment techniques, and interchange of fixed capacitors.

The design evolved from the need for a virtually indestructible miniature trimmer with superior electrical characteristics. Giga-Trim® capacitors withstand the rigors of soldering heat, excessive tuning and rough handling. As a result of the excellent dielectric and insulation properties of the sapphire housing, high breakdown voltage is achieved. Incorporating the patented self-locking constant torque drive mechanism\* which eliminates the need for external bushing slots, the new Giga-Trim® offers many improvements: a fixed length, increased Q, essentially zero tuning noise and reduced susceptibility to solder flux intrusion during installation.

A variety of mounting styles is available for vertical, printed circuit, panel, cavity and strip-line applications.



## APPLICATIONS

- RF amplifier
- Impedance matching
- Crystal trimming
- Interstage coupling
- Filter tuning

## CHARACTERISTICS

- Working Voltage: 500 VDC (1000 VDC Test)
- Long rotational life
- Insulation resistance: > 10<sup>6</sup> MΩ
- Temperature range: -65°C to +125°C
- RoHS compliant

| CAPACITANCE RANGE | SERIES | Q @ 250 MHZ | PAGE |
|-------------------|--------|-------------|------|
| 0.3 TO 1.2 pF     | 27260  | > 5000      | 2    |
| 0.4 TO 2.5 pF     | 27280  | > 4000      | 2    |
|                   | 47280  | > 4000      | 3    |
| 0.3 TO 2.3 pF     | 47480  | > 2000      | 3    |
| 0.6 TO 4.5 pF     | 17270  | > 2000      | 3    |
|                   | 27270  | > 3000      | 3    |
|                   | 47270  | > 3000      | 3    |
|                   | 57280  | > 1000**    | 3    |
| 0.8 TO 8.0 pF     | 27290  | > 3000*     | 4    |
|                   | 57270  | > 1000*     | 4    |
| 2.0 TO 6.0 pF     | 47470  | > 1500**    | 4    |

\* @ 100MHz \*\* @ 200 MHz

## TERMINAL CONFIGURATION

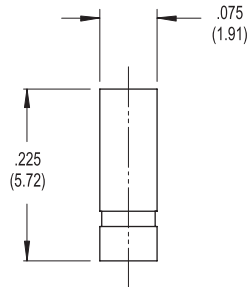


## 0.3 to 1.2 pF

- Capacitance Range: 0.3 to 1.2 pF (>5 turns)
- Working Voltage: 500 VDC (1000 VDC Test)
- Torque: 0.1 to 1 oz. In.
- Tuning Tool: 8762 or 8762-1
- Optional Seal Cap: P4445-1 or P4446-1
- RoHS Compliant

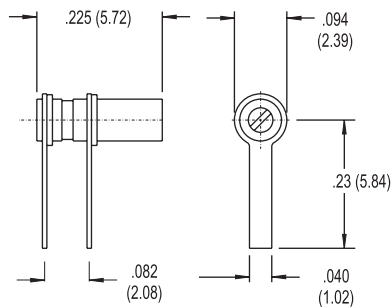
### 27260

Q @ 250 MHz  
>5000  
Sapphire



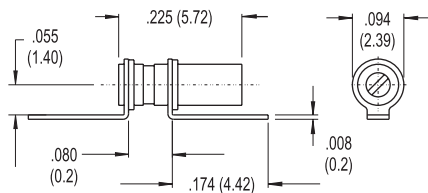
### 27261

Q @ 250 MHz  
>5000  
Sapphire



### 27261SL

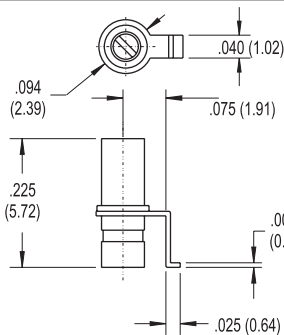
Q @ 250 MHz  
>5000  
Sapphire



### 27263

Q @ 250 MHz  
>5000  
Sapphire

Available in Tape/Reel  
27263-2R2  
1000 pcs/Reel

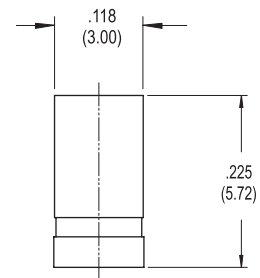


## 0.4 to 2.5 pF

- Capacitance Range: 0.4 to 2.5 pF (>4 turns)
- Working Voltage: 500 VDC (1000 VDC Test)
- Torque: 0.2 to 2 oz. In.
- Tuning Tool: 8766 or 8766-1
- Optional Seal Cap: P4445 or P4446
- RoHS Compliant

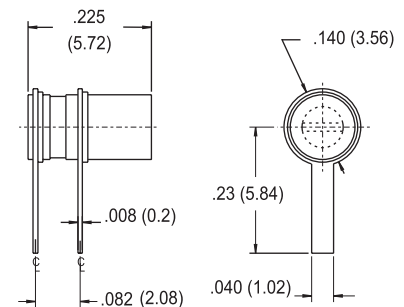
### 27280

Q @ 250 MHz  
>4000  
Sapphire



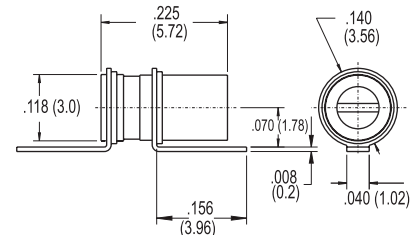
### 27281

Q @ 250 MHz  
>4000  
Sapphire



### 27281SL

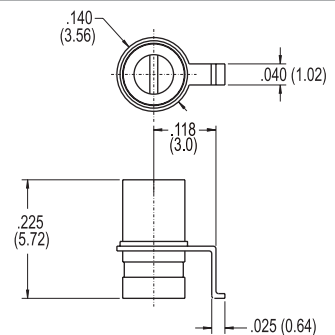
Q @ 250 MHz  
>4000  
Sapphire



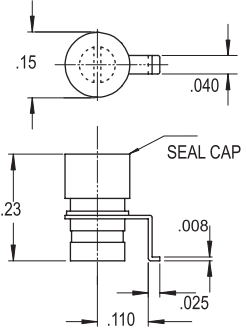
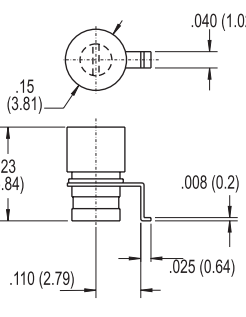
### 27283

Q @ 250 MHz  
>4000  
Sapphire

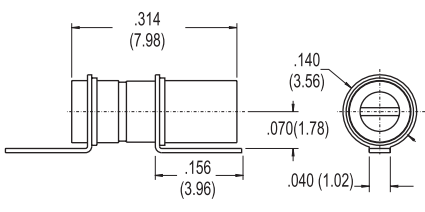
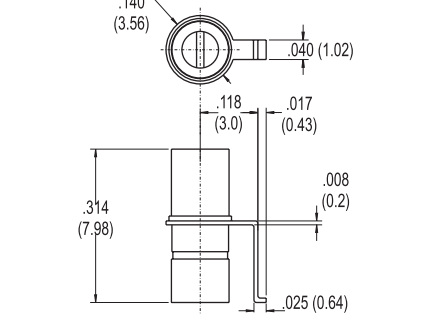
Available in Tape/Reel  
27283-3R10  
750 pcs/Reel



## 0.4 TO 2.5 pF

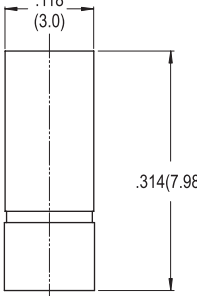
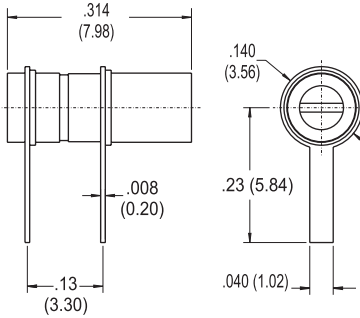
|                                                                                                                                                  |                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <p><b>47283</b></p> <p>Q @ 250 MHz<br/>&gt;4000<br/>Alumina</p> <p>Available in Tape/Reel<br/>47283-R10<br/>750 pcs/Reel</p>                     |  |
| <p><b>47483</b></p> <p>(0.3 to 2.3 pF)<br/>Q @ 237 MHz<br/>&gt;2000<br/>Alumina</p> <p>Available in Tape/Reel<br/>47483-R10<br/>750 pcs/Reel</p> |  |

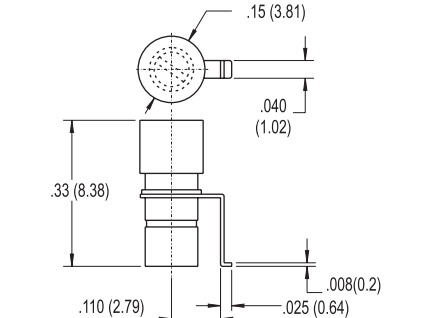
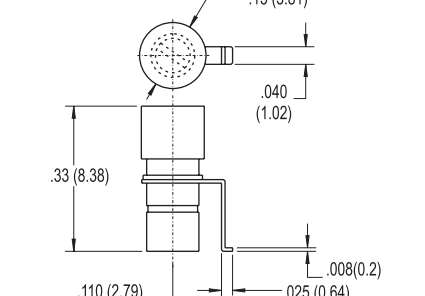
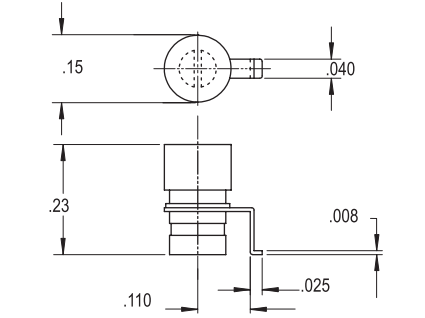
## 0.6 TO 4.5 pF

|                                                                                                                               |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b>27271SL</b></p> <p>Q @ 250 MHz<br/>&gt;3000<br/>Sapphire</p>                                                            |  |
| <p><b>27273</b></p> <p>Q @ 250 MHz<br/>&gt;3000<br/>Sapphire</p> <p>Available in Tape/Reel<br/>27273-3R5<br/>400 pcs/Reel</p> |  |

## 0.6 TO 4.5 pF

- Capacitance Range: 0.6 to 4.5 pF (>8 turns)
- Working Voltage: 500 VDC (1000 VDC Test)
- Torque: 0.2 to 2 oz. In.
- Tuning Tool: 8766 or 8766-1
- Optional Seal Cap: P4445 or P4446
- RoHS Compliant

|                                                                  |                                                                                     |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b>27270</b></p> <p>Q @ 250 MHz<br/>&gt;3000<br/>Sapphire</p> |  |
| <p><b>27271</b></p> <p>Q @ 250 MHz<br/>&gt;3000<br/>Sapphire</p> |  |

|                                                                                                                                  |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p><b>17273</b></p> <p>Q @ 250 MHz<br/>&gt;2000<br/>Alumina</p> <p>Available in Tape/Reel<br/>17273R5<br/>400 pcs/Reel</p>       |   |
| <p><b>47273</b></p> <p>Q @ 250 MHz<br/>&gt;3000<br/>Alumina</p> <p>Available in Tape/Reel<br/>47273R5<br/>400 pcs/Reel</p>       |  |
| <p><b>57283-1</b></p> <p>Q @ 200 MHz<br/>&gt;1000<br/>Zirconia</p> <p>Available in Tape/Reel<br/>57283-1R10<br/>750 pcs/Reel</p> |  |

## 0.8 TO 8.0 pF

- Capacitance Range: 0.8 to 8.0 pF (>16 turns)
- Working Voltage: 500 VDC (1000 VDC Test)
- Torque: 0.2 to 2 oz. In.
- Tuning Tool: 8766 or 8766-1
- Optional Seal Cap: P4445 or P4446
- RoHS Compliant

|                                                  |  |
|--------------------------------------------------|--|
| <b>27290</b><br>Q @ 100 MHz<br>>3000<br>Sapphire |  |
| <b>27291</b><br>Q @ 100 MHz<br>>3000<br>Sapphire |  |

|                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------|--|
| <b>27291SL</b><br>Q @ 100 MHz<br>>3000<br>Sapphire                                                               |  |
| <b>27293</b><br>Q @ 100 MHz<br>>3000<br>Sapphire                                                                 |  |
| <b>57273-1</b><br>Q @ 100 MHz<br>>2000<br>Zirconia<br>Available in Tape/Reel<br><b>57273-1R5</b><br>400 pcs/Reel |  |

## 2.0 TO 6.0 pF

- Capacitance Range: 2.0 to 6.0 pF (>6 turns)
- Working Voltage: 500 VDC (1000 VDC Test)
- Torque: 0.2 to 2 oz. In.
- Tuning Tool: 8766 or 8766-1
- RoHS Compliant

|                                                                                                             |  |
|-------------------------------------------------------------------------------------------------------------|--|
| <b>47473</b><br>Q @ 213 MHz<br>>1500<br>Alumina<br>Available in Tape/Reel<br><b>47473R5</b><br>400 pcs/Reel |  |
|-------------------------------------------------------------------------------------------------------------|--|



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