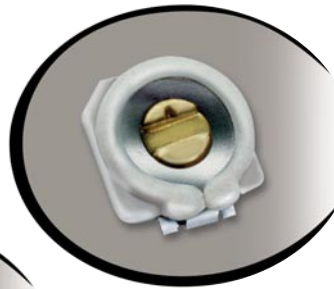


# Ceramic Chip Trimmer Capacitors

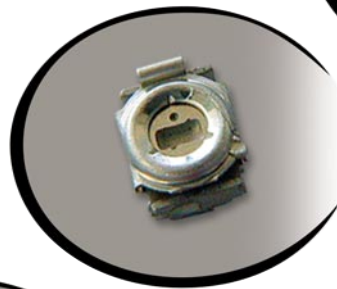
**J Series  
Outperforms  
All Other Similar  
Trimmers**



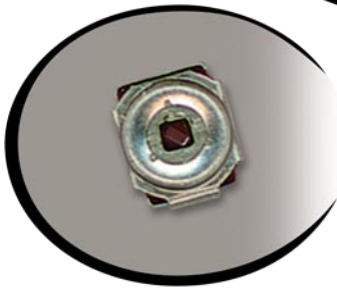
**JZ  
Series**



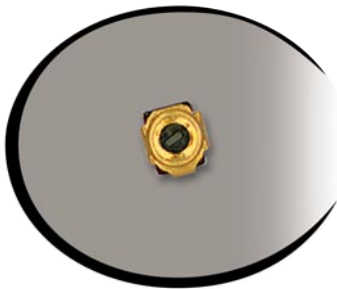
**JR  
Series**



**JV  
Series**



**JQ  
Series**



**JN  
Series**

## Most Stable Over Time

- <1% Capacitance Drift
- High Q Performance
- Tape & Reel Format
- In Stock and Ready to Ship

**Introducing the JZ\_HV and JR\_HV Series:  
High Voltage in a small package design!**





2250 Northwood Drive  
Salisbury, Maryland 21801  
Phone: 410.749.2424  
www.voltronicscorp.com

We now offer our JZ and JR series in a High-Voltage package: the JZ\_HV and JR\_HV. See pages 3 and 5 respectively for further details and be sure to order your engineering kits today!

Dear Valued Customer:

Voltronics has been offering high-performance, high Q, half-turn trimmer capacitors for over two decades. The J-Series is a proven performer that delivers uncompromising stability for even the most demanding applications, such as RFID, medical devices, cellular technologies, and much more.

*In years prior, we offered the J-Series exclusively to the United States but through recent acquisition as the manufacturer, we now supply the entire line worldwide.*

As indicated in the pages of this brochure, we offer the series in a variety of packages and specifications. Some additional information about the J-Series includes the following:

- We have sold tens of millions of J-Series components.
- They are the component of choice in thousands of designs worldwide.
- We offer direct-cross replacements for Sanshin part numbers.
- We offer engineering kits for all our J-Series components.

When your design demands indiscriminate performance, and when reliability becomes a high priority, choose the very best, which is the Voltronics J-Series ceramic chip trimmer capacitors.

Sincere regards,

The Voltronics Team



**World-Class Technology  
Worldwide Availability**

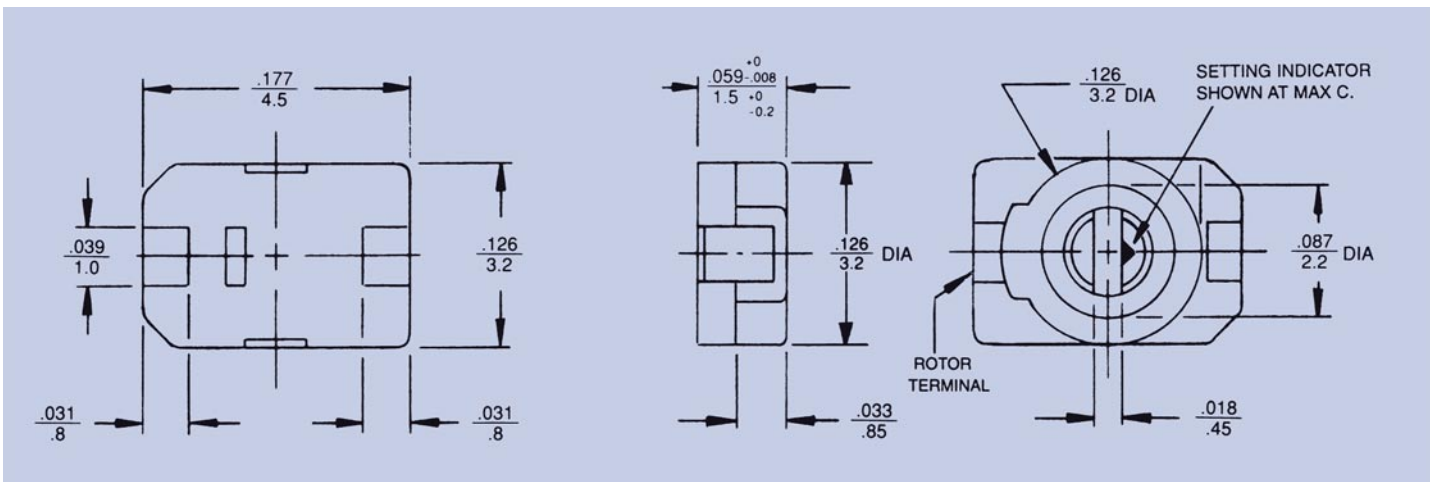
# Product Selection Guide

| Product Line  | Actual Size<br>Length x Width x Height       | Part Number | Cap. Range |            | Temperature Coefficient | SRF GHz | Mounting | Page  |
|---|--|-------------|------------|------------|-------------------------|---------|----------|-------|
|   |  |             | Min.       | Max.<br>pF |                         |         |          |       |
| JZ and<br>JZ_HV*  | .177 x .126 x .059 in<br>4.5 x 3.2 x 1.5 mm  | JZ030       | 1.5 –      | 3.0        | 0±200                   | 2.1     | Surface  | 2 & 3 |
|   |  | JZ060       | 2.0 –      | 6.0        | 0±300                   | 1.5     |          |       |
|   |  | JZ080       | 3.0 –      | 8.0        | -750±500                | 1.25    |          |       |
|   |  | JZ100       | 2.0 –      | 10.0       | 0±300                   | 1.16    |          |       |
|   |  | JZ150       | 3.0 –      | 15.0       | 0±300                   | 0.92    |          |       |
|   |  | JZ200       | 4.5 –      | 20.0       | 0±500                   | 0.81    |          |       |
|   |  | JZ300       | 5.5 –      | 30.0       | -750±500                | 0.7     |          |       |
|   |  | JZ400       | 8.0 –      | 40.0       | -750±500                | 0.6     |          |       |
| * Note: We now offer the series in a HIGH VOLTAGE VERSION. The JZ_HV series specifications are identical to the specifications listed above with this important exception: <b>DC Working Voltage 350DC, Withstanding Voltage 750.</b> |  |             |            |            |                         |         |          |       |
| JR and<br>JR_HV*  | .138 x .122 x .045 in<br>3.5 x 3.1 x 1.15 mm | JR030       | 1.5 –      | 3.0        | 0±200                   | 2.9     | Surface  | 4 & 5 |
|   |  | JR060       | 2.0 –      | 6.0        | 0±300                   | 2.05    |          |       |
|   |  | JR080       | 3.0 –      | 8.0        | -750±500                | 1.8     |          |       |
|   |  | JR100       | 2.0 –      | 10.0       | 0±300                   | 1.6     |          |       |
|   |  | JR150       | 3.0 –      | 15.0       | 0±500                   | 1.3     |          |       |
|   |  | JR200       | 4.5 –      | 20.0       | 0±500                   | 1.15    |          |       |
|   |  | JR300       | 5.5 –      | 30.0       | -750±500                | 0.92    |          |       |
|   |  | JR400       | 8.0 –      | 40.0       | -750±500                | 0.84    |          |       |
| * Note: We now offer the series in a HIGH VOLTAGE VERSION. The JR_HV series specifications are identical to the specifications listed above with this important exception: <b>DC Working Voltage 350DC, Withstanding Voltage 750.</b> |  |             |            |            |                         |         |          |       |
| JV  | .126 x .098 x .049 in<br>3.2 x 2.5 x 1.25 mm | JV010       | 0.5 –      | 1.0        | 0±300                   | 4.6     | Surface  | 6     |
|   |  | JV025       | 0.65 –     | 2.5        | 0±300                   | 2.9     |          |       |
|   |  | JV030       | 1.5 –      | 3.0        | 0±300                   | 2.6     |          |       |
|   |  | JV060       | 2.5 –      | 6.0        | 0±300                   | 1.9     |          |       |
|   |  | JV100       | 3.0 –      | 10.0       | 0±300                   | 1.4     |          |       |
|   |  | JV200       | 4.5 –      | 20.0       | -750±500                | 1.0     |          |       |
|   |  | JV250       | 5.5 –      | 25.0       | -750±500                | 0.9     |          |       |
|   |  | JV450       | 8.0 –      | 45.0       | -1000±500               | 0.6     |          |       |
| JQ  | .106 x .087 x .04 in<br>2.7 x 2.2 x 1.0 mm   | JQ060       | 3.0 –      | 6.0        | 0±300                   | 1.6     | Surface  | 7     |
|   |  | JQ100       | 3.5 –      | 10.0       | 0±300                   | 1.2     |          |       |
|   |  | JQ200       | 7.0 –      | 20.0       | -750±500                | 0.9     |          |       |
| JN  | .067 x .059 x .035 in<br>1.7 x 1.5 x 0.9 mm  | JN010       | 0.55 –     | 1.0        | 0±300                   | 6.0     | Surface  | 8     |
|   |  | JN015       | 0.7 –      | 1.5        | 0±300                   | 4.8     |          |       |
|   |  | JN040       | 1.5 –      | 4.0        | 0±500                   | 2.7     |          |       |
|   |  | JN080       | 3.0 –      | 8.0        | -750±500                | 1.8     |          |       |
| Engineering Kits and Q Data Charts  |  |             |            |            |                         |         |          | 9     |

# JZ SERIES - Ceramic Chip Trimmer Capacitors

## General Specifications

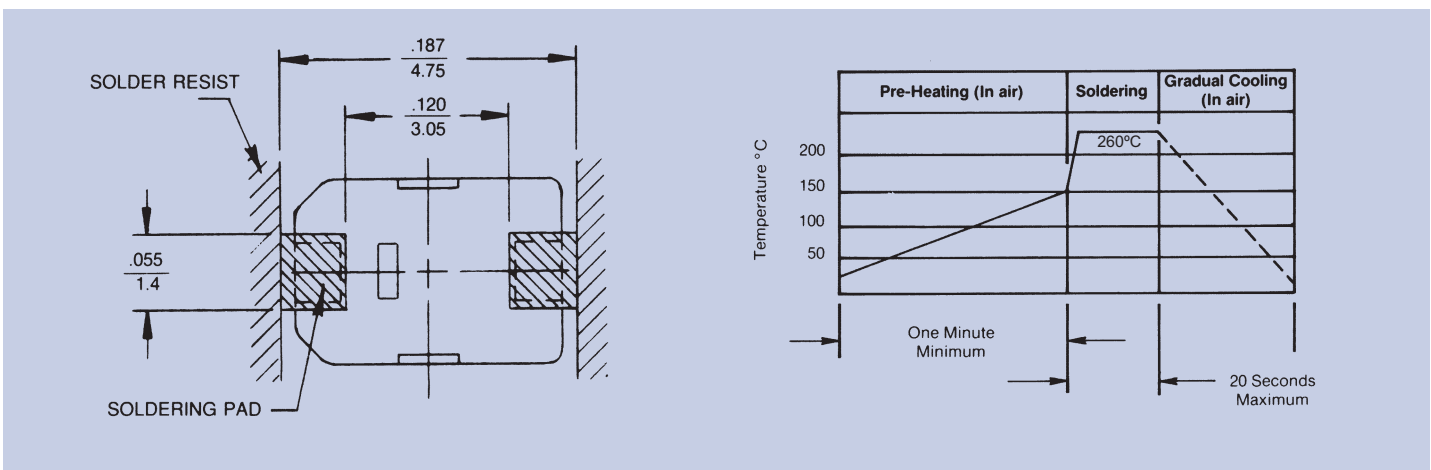
| Part Number  | JZ030   | JZ060                              | JZ080                              | JZ100                              | JZ150                                | JZ200                                | JZ300                                | JZ400                                |                                      |
|--|---|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Capacitance (pF)                                     | Minimum   | 1.5                                | 2.0                                | 3.0                                | 2.0                                  | 3.0                                  | 4.5                                  | 5.5                                  | 8.0                                  |
|  | Maximum   | 3.0 <sup>+50%</sup> <sub>-0%</sub> | 6.0 <sup>+50%</sup> <sub>-0%</sub> | 8.0 <sup>+50%</sup> <sub>-0%</sub> | 10.0 <sup>+100%</sup> <sub>-0%</sub> | 15.0 <sup>+100%</sup> <sub>-0%</sub> | 20.0 <sup>+100%</sup> <sub>-0%</sub> | 30.0 <sup>+100%</sup> <sub>-0%</sub> | 40.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | Black   | Blue                               | Violet                             | White                              | Pink                                 | Red                                  | Orange                               | Yellow                               |                                      |
| DC Working Voltage                                   | 125   | 125                                | 125                                | 125                                | 125                                  | 125                                  | 125                                  | 125                                  |                                      |
| DC Withstanding Voltage                              | 250   | 250                                | 250                                | 250                                | 250                                  | 250                                  | 250                                  | 250                                  |                                      |
| Temperature Coefficient (ppm/°C)                     | 0 ± 200   | 0 ± 300                            | -750 ± 500                         | 0 ± 300                            | 0 ± 300                              | 0 ± 500                              | -750 ± 500                           | -750 ± 500                           |                                      |
| Q (min.) at 1 MHz                                    | 500   | 1000                               | 1500                               | 1500                               | 1500                                 | 1500                                 | 1500                                 | 1500                                 |                                      |
| Self Resonant Frequency at Maximum Rated Capacitance | 2.1 GHz   | 1.5 GHz                            | 1.25 GHz                           | 1.16 GHz                           | 0.92 GHz                             | 0.81 GHz                             | 0.70 GHz                             | 0.60 GHz                             |                                      |
| Insulation Resistance                                | 10 <sup>4</sup> megohms   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Operating Temperature                                | -40°C to +85°C  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Torque   | 0.14 to 1.0 in-oz   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Packaging  | All parts furnished on 12mm tape and reel. 1,000 pcs. per reel. |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |



Drawing tolerances where not specified  $\pm 0.008$  in.  
 $\pm 0.200$  mm

## SOLDER PAD LAYOUT

## RECOMMENDED REFLOW SOLDER TEMPERATURE PROFILE FOR ALL J-SERIES TRIMMER CAPACITORS

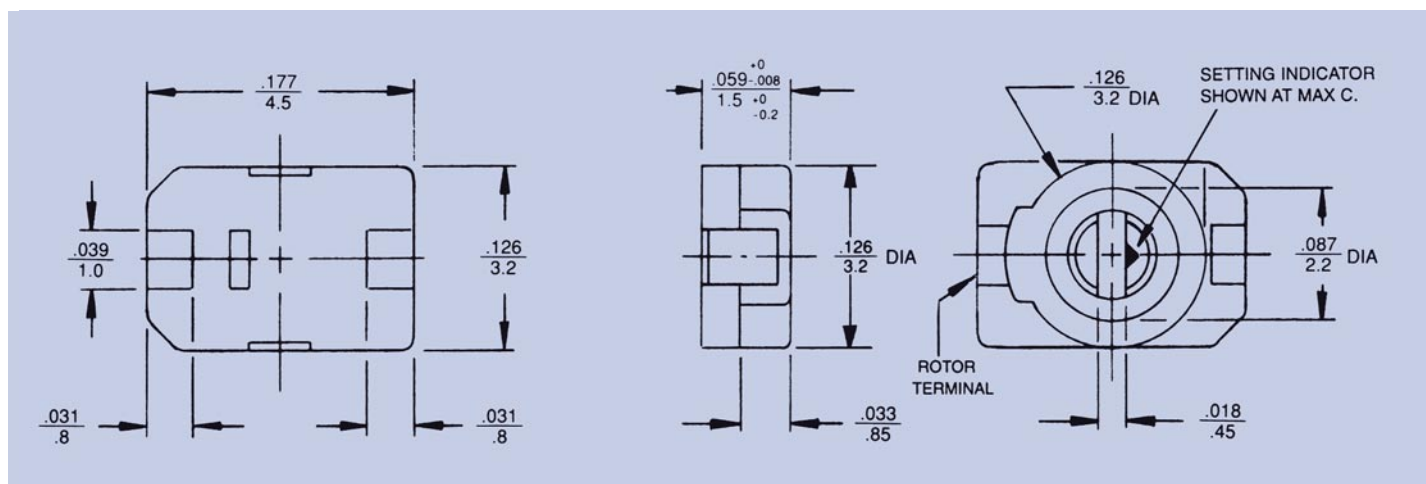


Recommended thickness of solder paste 0.15mm

# JZ\_HV SERIES - Ceramic Chip Trimmer Capacitors

## General Specifications

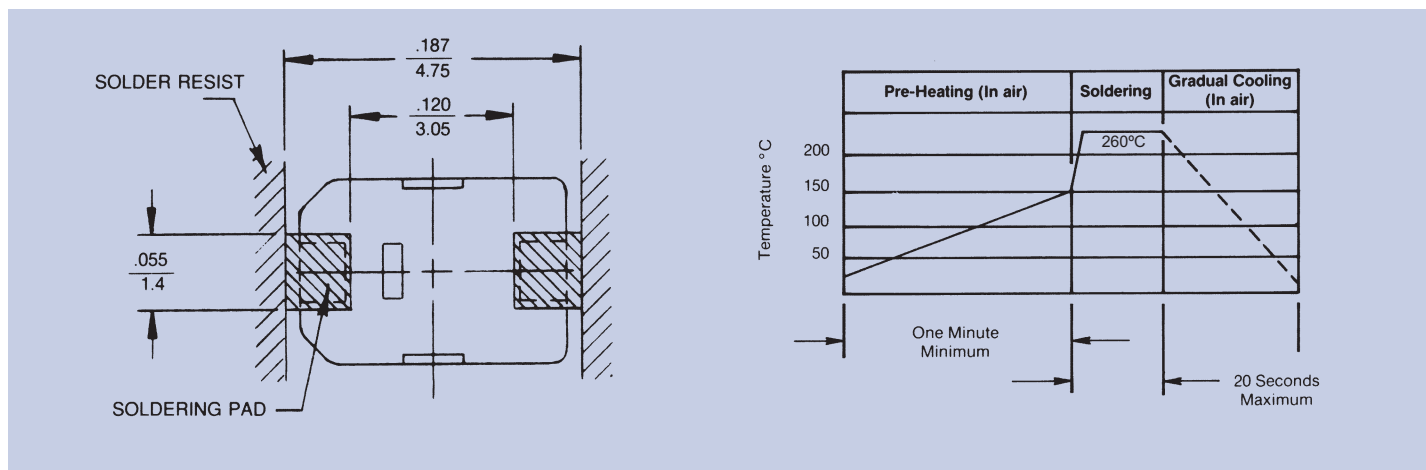
| Part Number  | JZ030   | JZ060                              | JZ080                              | JZ100                              | JZ150                                | JZ200                                | JZ300                                | JZ400                                |                                      |
|--|---|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Capacitance (pF)                                     | Minimum   | 1.5                                | 2.0                                | 3.0                                | 2.0                                  | 3.0                                  | 4.5                                  | 5.5                                  | 8.0                                  |
|  | Maximum   | 3.0 <sup>+50%</sup> <sub>-0%</sub> | 6.0 <sup>+50%</sup> <sub>-0%</sub> | 8.0 <sup>+50%</sup> <sub>-0%</sub> | 10.0 <sup>+100%</sup> <sub>-0%</sub> | 15.0 <sup>+100%</sup> <sub>-0%</sub> | 20.0 <sup>+100%</sup> <sub>-0%</sub> | 30.0 <sup>+100%</sup> <sub>-0%</sub> | 40.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | Black   | Blue                               | Violet                             | White                              | Pink                                 | Red                                  | Orange                               | Yellow                               |                                      |
| DC Working Voltage                                   | 350   | 350                                | 350                                | 350                                | 350                                  | 350                                  | 350                                  | 350                                  |                                      |
| DC Withstanding Voltage                              | 750   | 750                                | 750                                | 750                                | 750                                  | 750                                  | 750                                  | 750                                  |                                      |
| Temperature Coefficient (ppm/°C)                     | 0 ± 200   | 0 ± 300                            | -750 ± 500                         | 0 ± 300                            | 0 ± 300                              | 0 ± 500                              | -750 ± 500                           | -750 ± 500                           |                                      |
| Q (min.) at 1 MHz                                    | 500   | 1000                               | 1500                               | 1500                               | 1500                                 | 1500                                 | 1500                                 | 1500                                 |                                      |
| Self Resonant Frequency at Maximum Rated Capacitance | 2.1 GHz   | 1.5 GHz                            | 1.25 GHz                           | 1.16 GHz                           | 0.92 GHz                             | 0.81 GHz                             | 0.70 GHz                             | 0.60 GHz                             |                                      |
| Insulation Resistance                                | 10 <sup>4</sup> megohms   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Operating Temperature                                | -40°C to +85°C  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Torque   | 0.14 to 1.0 in-oz   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Packaging  | All parts furnished on 12mm tape and reel. 1,000 pcs. per reel. |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |



Drawing tolerances where not specified  $\pm 0.008$  in.  
0.200 mm

## SOLDER PAD LAYOUT

## RECOMMENDED REFLOW SOLDER TEMPERATURE PROFILE FOR ALL J-SERIES TRIMMER CAPACITORS



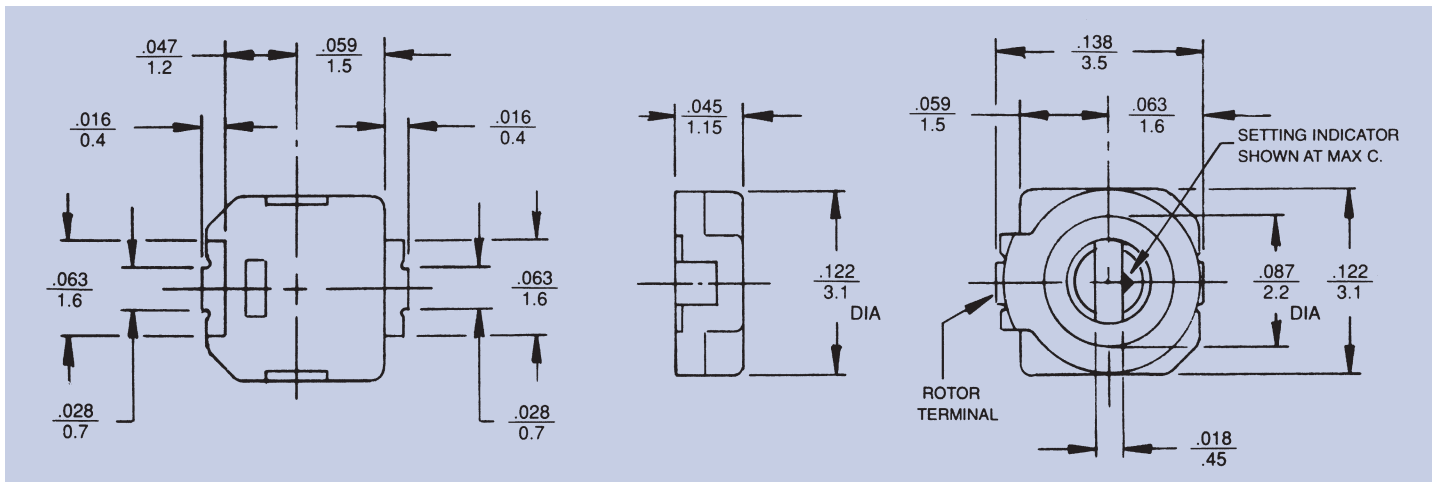
Recommended thickness of solder paste 0.15mm



# JR SERIES - Ceramic Chip Trimmer Capacitors

## General Specifications

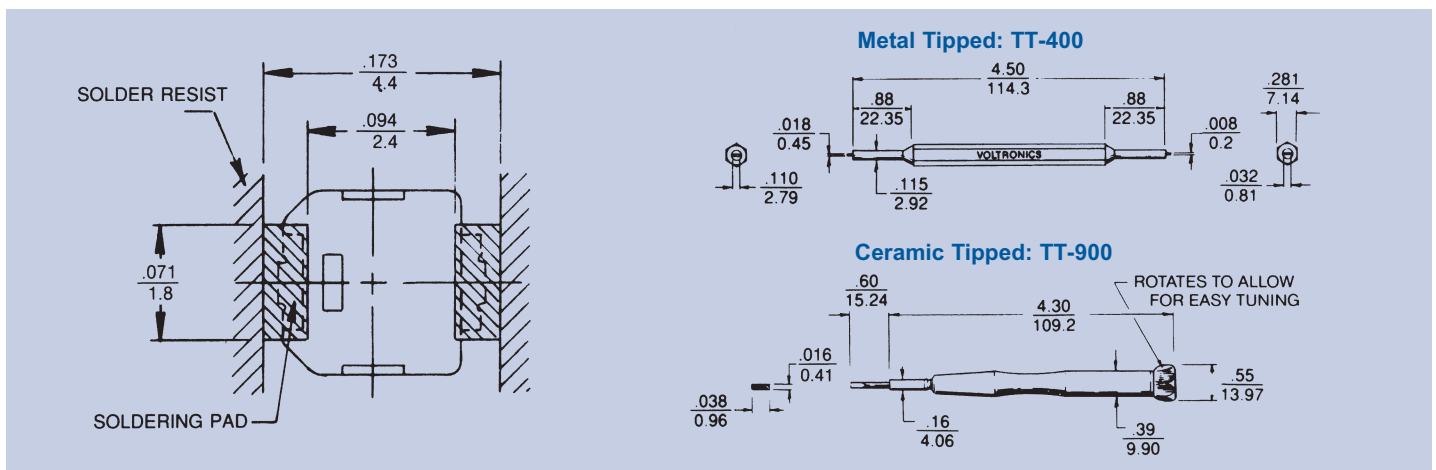
| Part Number  | JR030   | JR060                              | JR080                              | JR100                              | JR150                                | JR200                                | JR300                                | JR400                                |                                      |
|--|---|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Capacitance (pF)                                     | Minimum   | 1.5                                | 2.0                                | 3.0                                | 2.0                                  | 3.0                                  | 4.5                                  | 5.5                                  | 8.0                                  |
|  | Maximum   | 3.0 <sup>+50%</sup> <sub>-0%</sub> | 6.0 <sup>+50%</sup> <sub>-0%</sub> | 8.0 <sup>+50%</sup> <sub>-0%</sub> | 10.0 <sup>+100%</sup> <sub>-0%</sub> | 15.0 <sup>+100%</sup> <sub>-0%</sub> | 20.0 <sup>+100%</sup> <sub>-0%</sub> | 30.0 <sup>+100%</sup> <sub>-0%</sub> | 40.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | Black   | Blue                               | Violet                             | None                               | Pink                                 | Red                                  | Orange                               | Yellow                               |                                      |
| DC Working Voltage                                   | 125   | 125                                | 125                                | 125                                | 125                                  | 125                                  | 125                                  | 125                                  |                                      |
| DC Withstanding Voltage                              | 250   | 250                                | 250                                | 250                                | 250                                  | 250                                  | 250                                  | 250                                  |                                      |
| Temperature Coefficient (ppm/°C)                     | 0 ± 200   | 0 ± 300                            | -750 ± 500                         | 0 ± 300                            | 0 ± 500                              | 0 ± 500                              | -750 ± 500                           | -750 ± 500                           |                                      |
| Q (min.) at 1 MHz                                    | 500   | 1000                               | 1500                               | 1500                               | 1500                                 | 1500                                 | 1500                                 | 1500                                 |                                      |
| Self Resonant Frequency at Maximum Rated Capacitance | 2.9 GHz   | 2.05 GHz                           | 1.8 GHz                            | 1.6 GHz                            | 1.3 GHz                              | 1.15 GHz                             | 0.92 GHz                             | 0.84 GHz                             |                                      |
| Insulation Resistance                                | 10 <sup>4</sup> megohms   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Operating Temperature                                | -40°C to +85°C  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Torque   | 0.6 in-oz max.  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Packaging  | All parts furnished on 12mm tape and reel. 1,000 pcs. per reel. |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |



Drawing tolerances where not specified  $\pm 0.008$  in.  
 $\pm 0.200$  mm

## SOLDER PAD LAYOUT

## RECOMMENDED TUNING TOOLS FOR JZ AND JR SERIES

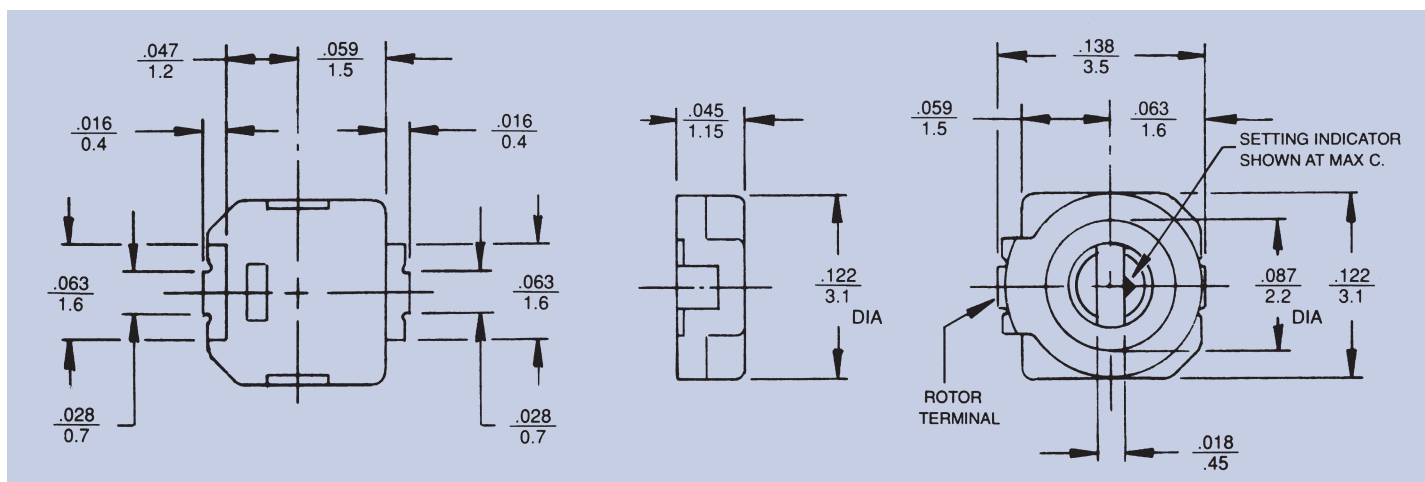


Recommended thickness of solder paste 0.15mm

# JR\_HV SERIES - Ceramic Chip Trimmer Capacitors

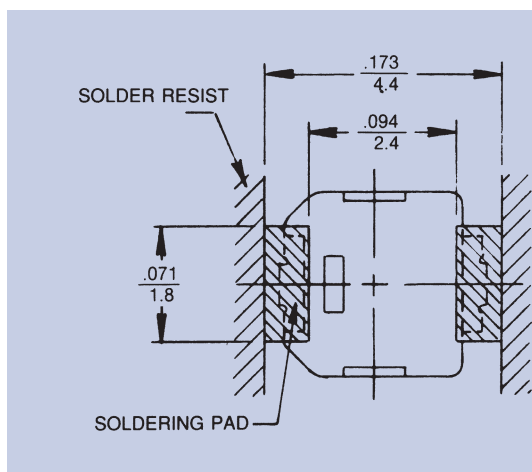
## General Specifications

| Part Number  | JR030   | JR060                              | JR080                              | JR100                              | JR150                                | JR200                                | JR300                                | JR400                                |                                      |
|--|---|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Capacitance (pF)                                     | Minimum   | 1.5                                | 2.0                                | 3.0                                | 2.0                                  | 3.0                                  | 4.5                                  | 5.5                                  | 8.0                                  |
|  | Maximum   | 3.0 <sup>+50%</sup> <sub>-0%</sub> | 6.0 <sup>+50%</sup> <sub>-0%</sub> | 8.0 <sup>+50%</sup> <sub>-0%</sub> | 10.0 <sup>+100%</sup> <sub>-0%</sub> | 15.0 <sup>+100%</sup> <sub>-0%</sub> | 20.0 <sup>+100%</sup> <sub>-0%</sub> | 30.0 <sup>+100%</sup> <sub>-0%</sub> | 40.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | Black   | Blue                               | Violet                             | None                               | Pink                                 | Red                                  | Orange                               | Yellow                               |                                      |
| DC Working Voltage                                   | 350   | 350                                | 350                                | 350                                | 350                                  | 350                                  | 350                                  | 350                                  |                                      |
| DC Withstanding Voltage                              | 750   | 750                                | 750                                | 750                                | 750                                  | 750                                  | 750                                  | 750                                  |                                      |
| Temperature Coefficient (ppm/°C)                     | 0 ± 200   | 0 ± 300                            | -750 ± 500                         | 0 ± 300                            | 0 ± 500                              | 0 ± 500                              | -750 ± 500                           | -750 ± 500                           |                                      |
| Q (min.) at 1 MHz                                    | 500   | 1000                               | 1500                               | 1500                               | 1500                                 | 1500                                 | 1500                                 | 1500                                 |                                      |
| Self Resonant Frequency at Maximum Rated Capacitance | 2.9 GHz   | 2.05 GHz                           | 1.8 GHz                            | 1.6 GHz                            | 1.3 GHz                              | 1.15 GHz                             | 0.92 GHz                             | 0.84 GHz                             |                                      |
| Insulation Resistance                                | 10 <sup>4</sup> megohms   |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Operating Temperature                                | -40°C to +85°C  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Torque   | 0.6 in-oz max.  |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |
| Packaging  | All parts furnished on 12mm tape and reel. 1,000 pcs. per reel. |                                    |                                    |                                    |                                      |                                      |                                      |                                      |                                      |

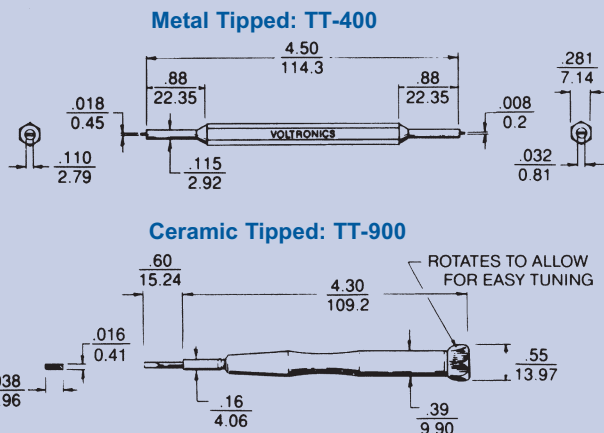


Drawing tolerances where not specified  $\pm 0.008$  in.  
 $\pm 0.200$  mm

## SOLDER PAD LAYOUT



## RECOMMENDED TUNING TOOLS FOR JZ AND JR SERIES

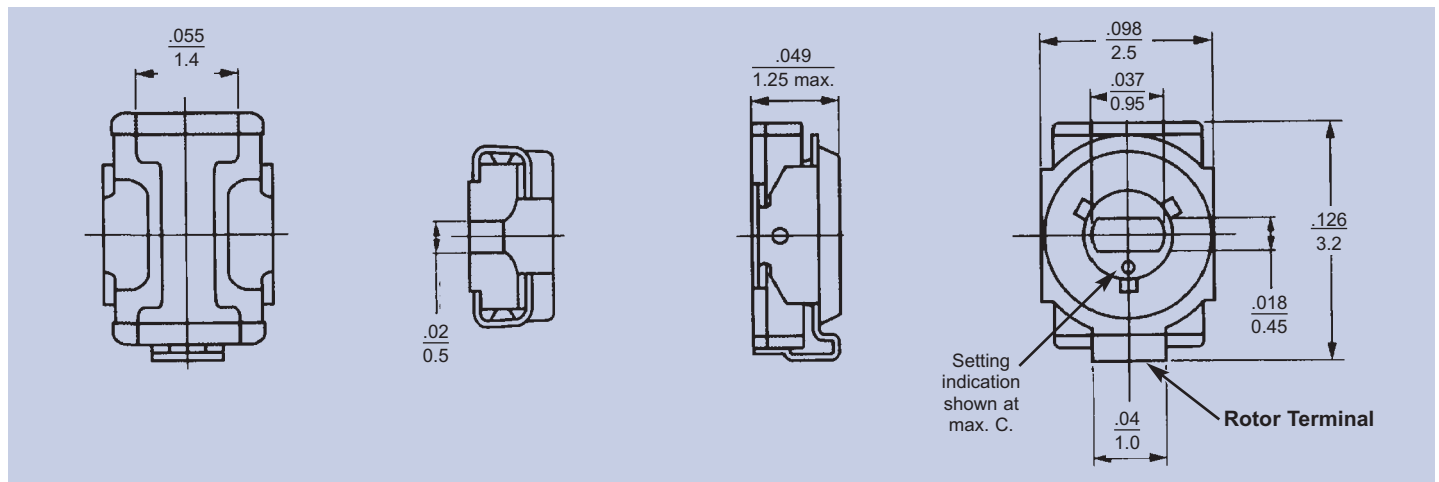


Recommended thickness of solder paste 0.15mm

# JV SERIES - Ceramic Chip Trimmer Capacitors

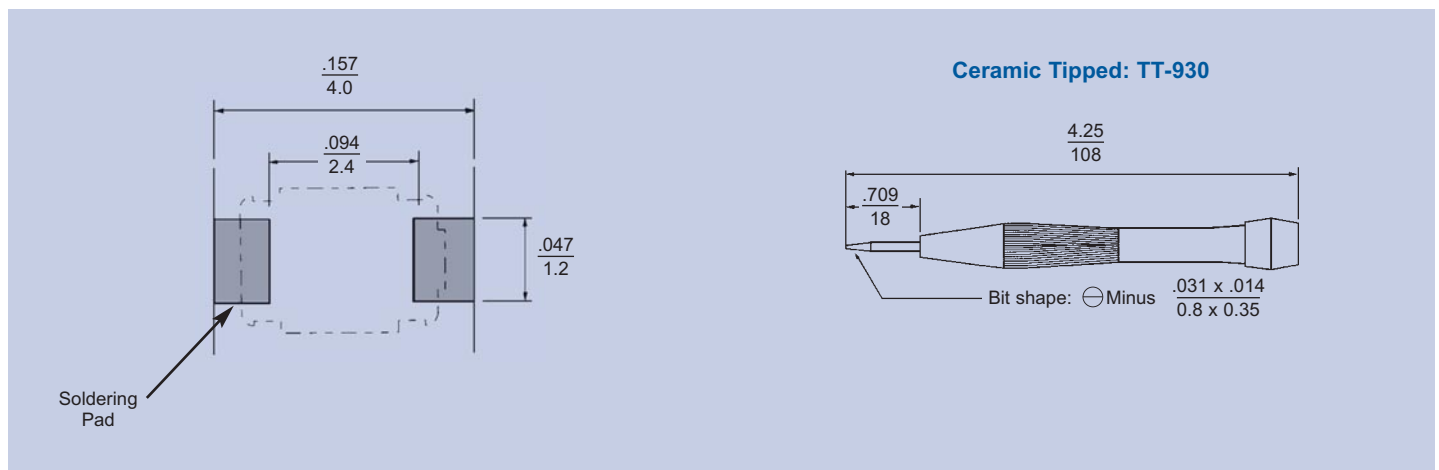
## General Specifications

| Part Number  | JV010  | JV025                 | JV030                 | JV060                 | JV100                 | JV200                  | JV250                  | JV450                  |                        |
|--|--|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
| Capacitance (pF)                                     | Minimum  | 0.5                   | 0.65                  | 1.5                   | 2.5                   | 3.0                    | 4.5                    | 5.5                    | 8.0                    |
|  | Maximum  | 1.0 $^{+100\%}_{0\%}$ | 2.5 $^{+100\%}_{0\%}$ | 3.0 $^{+100\%}_{0\%}$ | 6.0 $^{+100\%}_{0\%}$ | 10.0 $^{+100\%}_{0\%}$ | 20.0 $^{+100\%}_{0\%}$ | 25.0 $^{+100\%}_{0\%}$ | 45.0 $^{+100\%}_{0\%}$ |
| Marking Color  | None   | None                  | None                  | None                  | None                  | None                   | None                   | None                   |                        |
| DC Working Voltage                                   | 25   | 25                    | 25                    | 25                    | 25                    | 25                     | 25                     | 25                     |                        |
| DC Withstanding Voltage                              | 55   | 55                    | 55                    | 55                    | 55                    | 55                     | 55                     | 55                     |                        |
| Temperature Coefficient (ppm/°C)                     | 0±300  | 0±300                 | 0±300                 | 0±300                 | 0±300                 | -750±500               | -750±500               | -1000±500              |                        |
| Q (min.) at 1 MHz                                    | 500  | 500                   | 500                   | 500                   | 500                   | 500                    | 300                    | 300                    |                        |
| Self Resonant Frequency at Maximum Rated Capacitance | 4.6 GHz  | 2.9 GHz               | 2.6 GHz               | 1.9 GHz               | 1.4 GHz               | 1.0 GHz                | 0.9 GHz                | 0.6 GHz                |                        |
| Insulation Resistance                                | 10 <sup>4</sup> megohms  |                       |                       |                       |                       |                        |                        |                        |                        |
| Operating Temperature                                | -25°C to +85°C   |                       |                       |                       |                       |                        |                        |                        |                        |
| Torque   | 0.6 in-oz max.   |                       |                       |                       |                       |                        |                        |                        |                        |
| Packaging  | All parts furnished on 8mm tape and reel. 2,000 pcs. per reel. |                       |                       |                       |                       |                        |                        |                        |                        |



Drawing tolerances where not specified  $\pm 0.020$  in.  
 $\pm 0.500$  mm

## SOLDER PAD LAYOUT



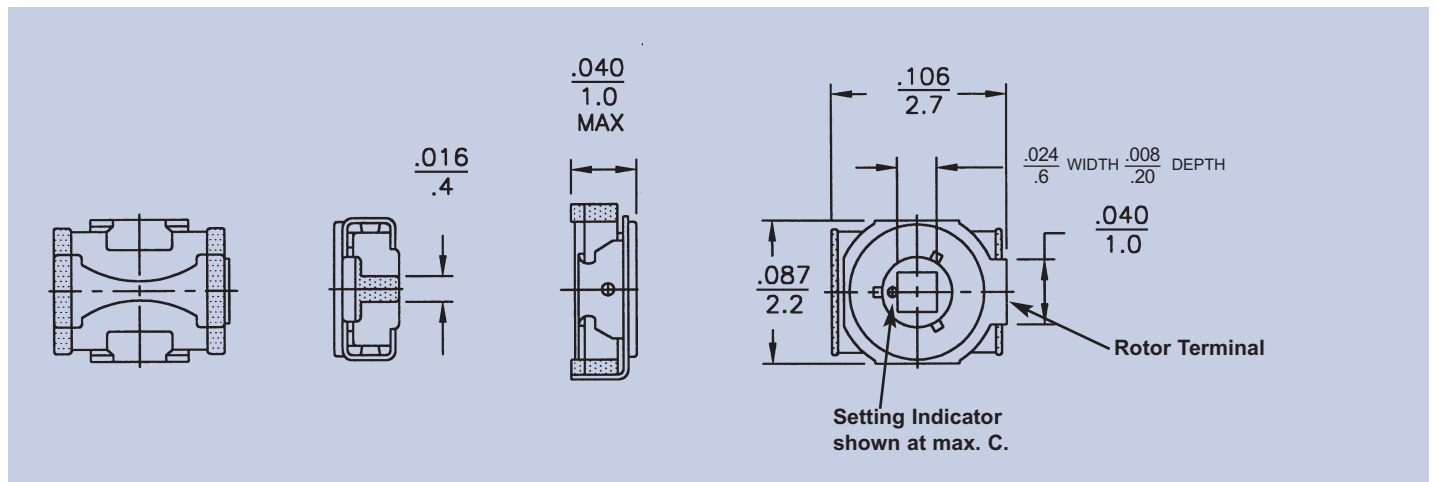
Recommended thickness of solder paste 0.15mm



# JQ SERIES - Ceramic Chip Trimmer Capacitors

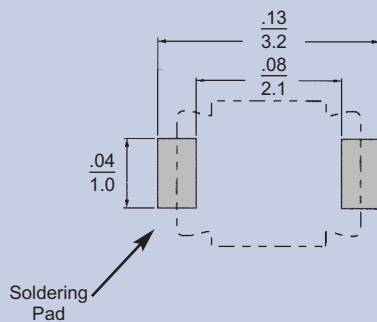
## General Specifications

| Part Number  | JQ060  | JQ100                                | JQ200                                |
|--|--|--------------------------------------|--------------------------------------|
| Capacitance (pF) Minimum                             | 3.0  | 3.5                                  | 7.0                                  |
| Capacitance (pF) Maximum                             | 6.0 <sup>+100%</sup> <sub>-0%</sub>                            | 10.0 <sup>+100%</sup> <sub>-0%</sub> | 20.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | None   | None                                 | None                                 |
| DC Working Voltage                                   | 25   | 25                                   | 25                                   |
| DC Withstanding Voltage                              | 55   | 55                                   | 55                                   |
| Temperature Coefficient (ppm/°C)                     | 0 ± 300  | 0 ± 300                              | -750 ± 500                           |
| Q (min.) at 1 MHz                                    | 500  | 500                                  | 500                                  |
| Self Resonant Frequency at Maximum Rated Capacitance | 1.6 GHz  | 1.2 GHz                              | 0.9 GHz                              |
| Insulation Resistance                                | 10 <sup>4</sup> megohms  |                                      |                                      |
| Operating Temperature                                | -25°C to +85°C   |                                      |                                      |
| Torque   | .07 to 7.0 in-oz   |                                      |                                      |
| Packaging  | All parts furnished on 8mm tape and reel. 3,000 pcs. per reel. |                                      |                                      |



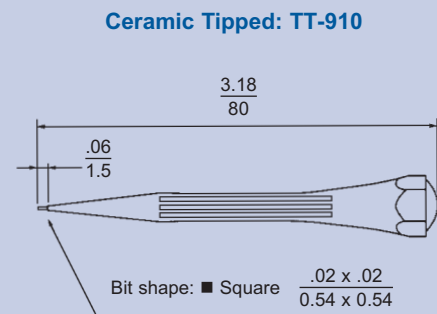
Drawing tolerances where not specified ± 0.020 in.  
± 0.500 mm

## SOLDER PAD LAYOUT



Recommended thickness of solder paste 0.15mm

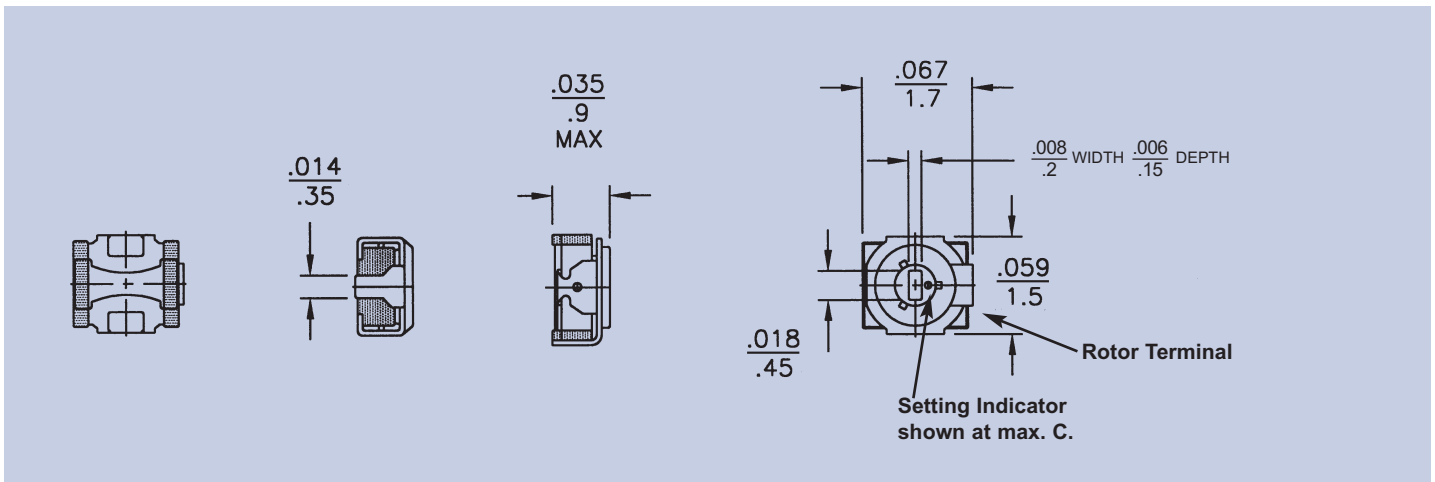
## RECOMMENDED TUNING TOOL FOR JQ SERIES



# JN SERIES - Ceramic Chip Trimmer Capacitors

## General Specifications

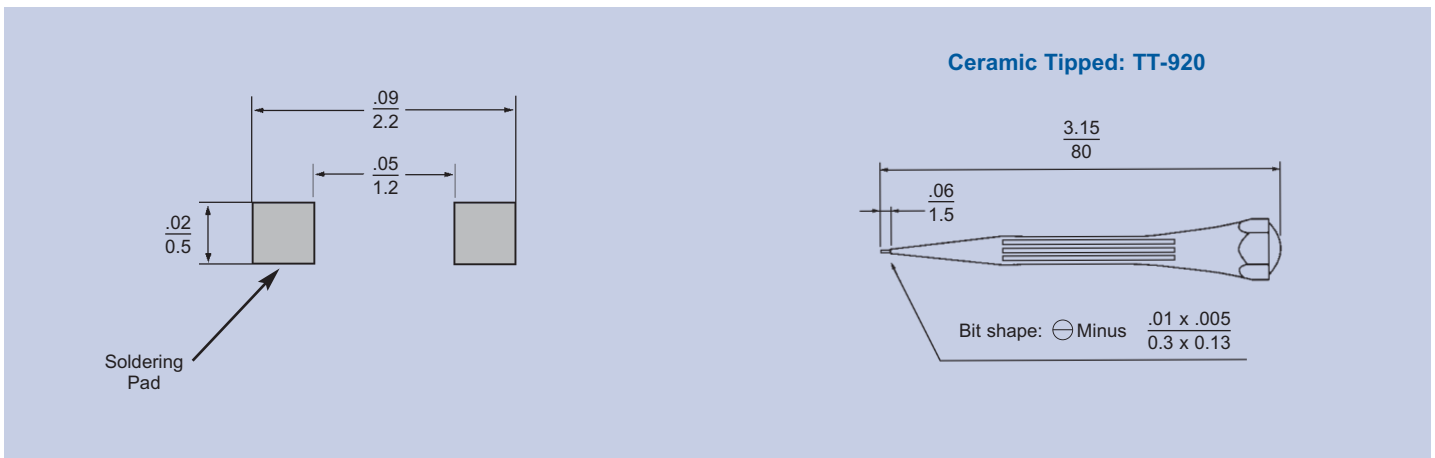
| Part Number  | JN010  | JN015                               | JN040                               | JN080                               |
|--|--|-------------------------------------|-------------------------------------|-------------------------------------|
| Capacitance (pF)                                     | 0.55   | 0.7                                 | 1.5                                 | 3.0                                 |
| Minimum  | 0.55   | 0.7                                 | 1.5                                 | 3.0                                 |
| Maximum  | 1.0 <sup>+100%</sup> <sub>-0%</sub>                            | 1.5 <sup>+100%</sup> <sub>-0%</sub> | 4.0 <sup>+100%</sup> <sub>-0%</sub> | 8.0 <sup>+100%</sup> <sub>-0%</sub> |
| Marking Color  | None   | None                                | None                                | None                                |
| DC Working Voltage                                   | 25   | 25                                  | 25                                  | 25                                  |
| DC Withstanding Voltage                              | 55   | 55                                  | 55                                  | 55                                  |
| Temperature Coefficient (ppm/°C)                     | 0 ± 300  | 0 ± 300                             | 0 ± 500                             | -750 ± 500                          |
| Q (min.) at 1 MHz                                    | 500  | 500                                 | 300                                 | 300                                 |
| Self Resonant Frequency at Maximum Rated Capacitance | 6.0 GHz  | 4.8 GHz                             | 2.7 GHz                             | 1.8 GHz                             |
| Insulation Resistance                                | 10 <sup>4</sup> megohms  |                                     |                                     |                                     |
| Operating Temperature                                | -25°C to +85°C   |                                     |                                     |                                     |
| Torque   | .014 to .14 in-oz  |                                     |                                     |                                     |
| Packaging  | All parts furnished on 8mm tape and reel. 3,000 pcs. per reel. |                                     |                                     |                                     |



Drawing tolerances where not specified  $\pm 0.020$  in.  
 $\pm 0.500$  mm

### SOLDER PAD LAYOUT

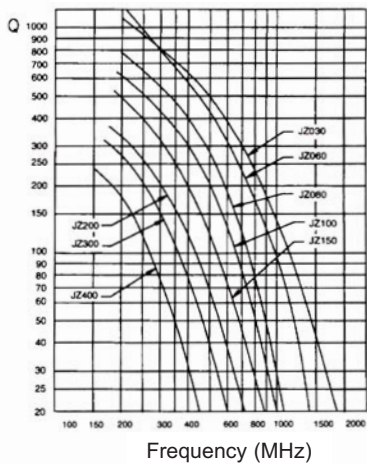
### RECOMMENDED TUNING TOOL FOR JN SERIES



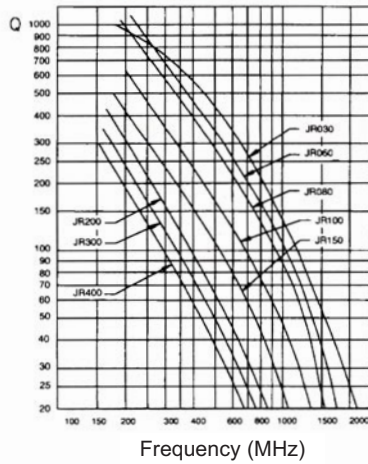
Recommended thickness of solder paste 0.15mm

# Q DATA CHARTS & ENGINEERING KITS

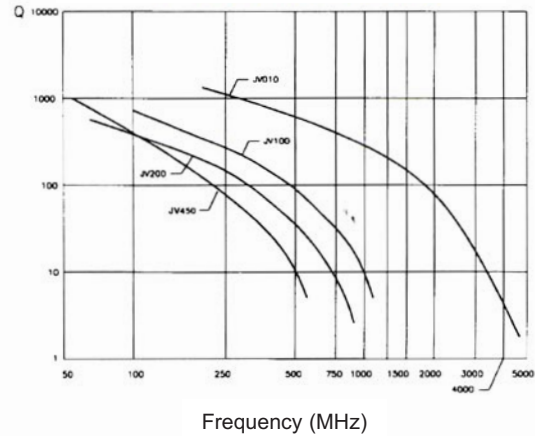
**Quality Factor (Q)  
of "JZ" Series Capacitors**



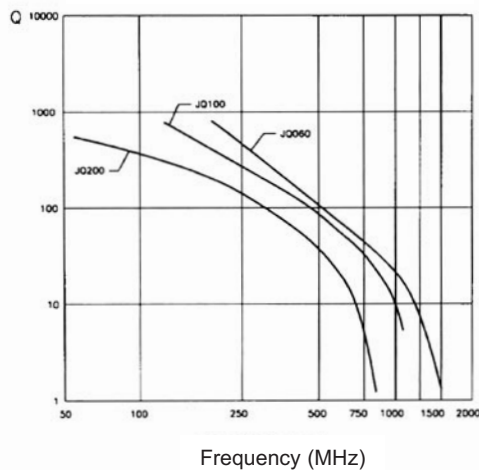
**Quality Factor (Q)  
of "JR" Series Capacitors**



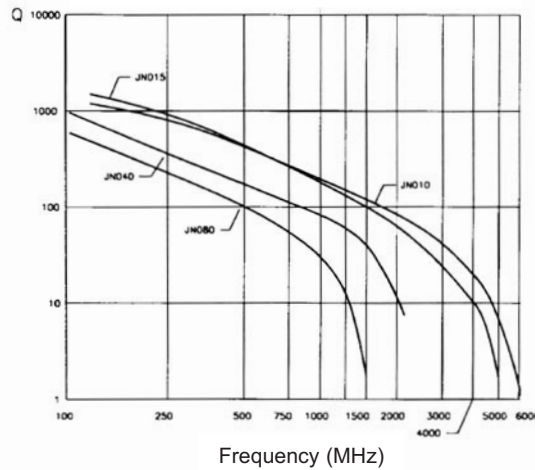
**Quality Factor (Q)  
of "JV" Series Capacitors**



**Quality Factor (Q)  
of "JQ" Series Capacitors**



**Quality Factor (Q)  
of "JN" Series Capacitors**



## Engineering Kits

| Kit #      | Quantity | Description            |
|------------|----------|------------------------|
| JZ Kit*    | 4        | Each Capacitance Range |
| JZ-HV Kit* |          |                        |
| JR Kit*    | 4        |                        |
| JR-HV Kit* | 4        |                        |
| JV Kit**   | 5        |                        |
| JQ Kit**   | 5        |                        |
| JN Kit**   | 5        |                        |

J-Series engineering kits are a great way to become familiar with our products. Each kit contains 4 or 5 units of every value. Please be sure to inquire about tuning tools when ordering.  
 \* Tuning tools are included with this kit.  
 \*\* Tuning tools are not included with this kit. Please inquire about tuning tools when ordering.

## Washing Instructions:

The J-Series trimmer capacitors can withstand cleaning cycles up to 10 PSI and have been used by customers for more than a decade in many diverse environmental conditions. Without knowing your particular washing or cleaning environment, we recommend these basic guidelines:

- 1) Water wash or isopropyl alcohol cleaning agents are acceptable providing that baths are clean and uncontaminated. For maximum effectiveness, the cleaning process should occur immediately after soldering.
- 2) Either brush or spray methods are acceptable.
- 3) \*Drying out components with forced hot air is highly recommended.
- 4) Also, we do recommend turning the tuning screw 3 or 4 complete revolutions prior to arriving at the final "set."

\* If a water wash process is used and water does get inside, we recommend that the parts be heated above 100C for a minimum of 15 minutes, so that the water evaporates. After this, the rotor should be turned 1-2 times to redistribute the internal grease.

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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
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## JONHON

«JONHON» (основан в 1970 г.)

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(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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