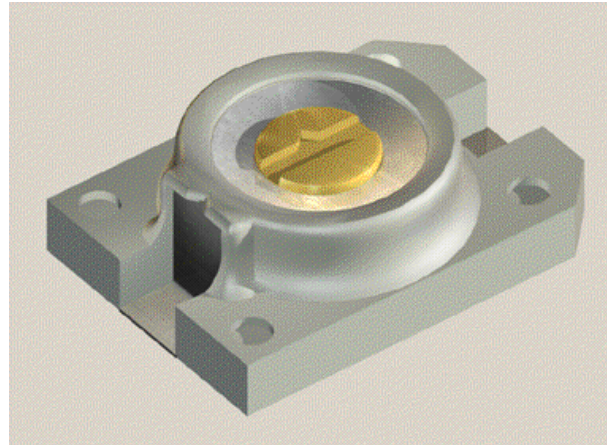


# High Voltage Chip Trim Ceramic Trimmer Capacitors AT 03HV00 SERIES

## SURFACE MOUNT TRIMMER CAPACITORS, ROHS COMPLIANT

### DESCRIPTION

Very compact package type  
 Ceramic dielectric  
 Special design for reflow soldering use  
 Rated voltage **350 VDC** (test **770 VDC**)  
 Low temperature coefficient  
 Low capacitance drift  
 Very stable over time  
 Terminals are **pure tin plated**  
 High resonance frequency and very good Q  
 Special design for easy vacuum pickup  
 Delivered on 12 mm tape and reel  
**RoHS** compliant  
**Maximum Soldering Temperature 265°C, 3 s Max**



### APPLICATIONS

High power radio transmission  
 Power amplifier for cellular base station  
 Amplifier for cable TV

### I. ELECTRICAL SPECIFICATIONS

| P/N  | AT 03HV03<br>ROHS | AT 03HV06<br>ROHS | AT 03HV08<br>ROHS | AT 03HV10<br>ROHS  | AT 03HV15<br>ROHS  | AT 03HV20<br>ROHS  |
|--|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| From below                                     | 1.5               | 2.0               | 3.0               | 2.0                | 3.0                | 4.5                |
| Capacitance range (pF)                         | +50%              | +50%              | +50%              | +50%               | +50%               | +50%               |
| To above                                       | 3.0 <sub>-0</sub> | 6.0 <sub>-0</sub> | 8.0 <sub>-0</sub> | 10.0 <sub>-0</sub> | 15.0 <sub>-0</sub> | 20.0 <sub>-0</sub> |
| Working Voltage(VDC)                           | 350               |                   |                   |                    |                    |                    |
| Withstanding Voltage(VDC)                      | 770               |                   |                   |                    |                    |                    |
| Working Temp. range                            | -40°C to +85°C    |                   |                   |                    |                    |                    |
| Temp. Coeff. (ppm/°C)                          | 0+/-200           | 0+/-300           | -750+/-500        | 0+/-300            | 0+/-500            | 0+/-500            |
| Capacitance drift (pF)                         | 0.1 Max           | 0.1 Max           | 0.2 Max           | 0.3 Max            | 0.4 Max            | 0.5 Max            |
| Setting drift                                  | <1%               |                   |                   |                    |                    |                    |
| Typical Self-Resonance Frequency at CMax (GHz) | 2.0               | 1.4               | 1.2               | 1.1                | 0.9                | 0.8                |
| Insulation Resistance (MΩ)                     | 10000 min         |                   |                   |                    |                    |                    |
| Q @ 1 Mz, Cmax                                 | 500 min           |                   |                   |                    |                    |                    |

*PRELIMINARY DATA SHEET*

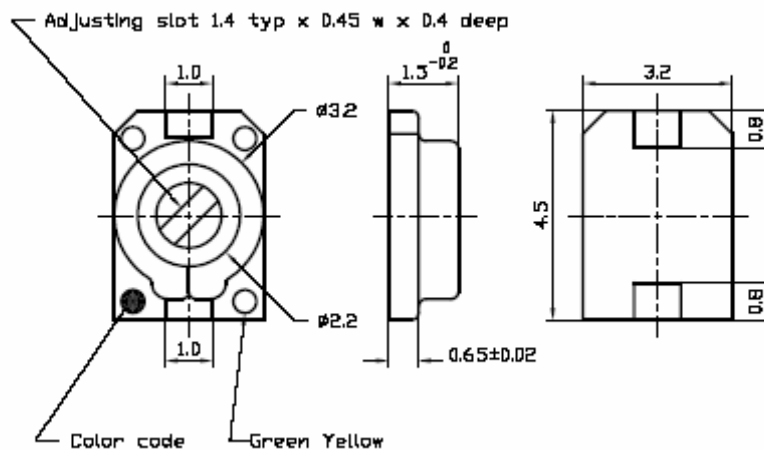
# High Voltage Chip Trim Ceramic Trimmer Capacitors AT 03HV00 SERIES

## SURFACE MOUNT TRIMMER CAPACITORS, ROHS COMPLIANT

### II. MECHANICAL & GENERAL SPECIFICATIONS

| P/N                             | AT 03HV03<br>ROHS | AT 03HV06<br>ROHS | AT 03HV08<br>ROHS | AT 03HV10<br>ROHS | AT 03HV15<br>ROHS | AT 03HV20<br>ROHS |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Color Code                      | Black             | Blue              | Violet            | None              | Pink              | Red               |
| Rotating Torque                 | 10 to 70 g.cm     |                   |                   |                   |                   |                   |
| Tensile strength of terminaison | 250 g             |                   |                   |                   |                   |                   |
| Resistance to axial load        | 500 g             |                   |                   |                   |                   |                   |

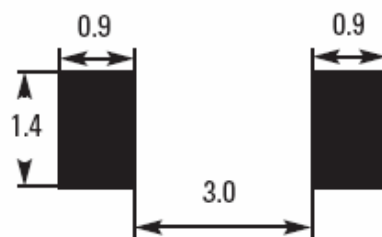
### III. OUTLINE DIMENSIONS



Green Yellow dot means AT 03HV00 ROHS series, and color dot indicates reference of the model

### IV. SOLDERING

AT 03HV00 ROHS Series Typical solder pad layout  
Tolerance ± 0.2 mm

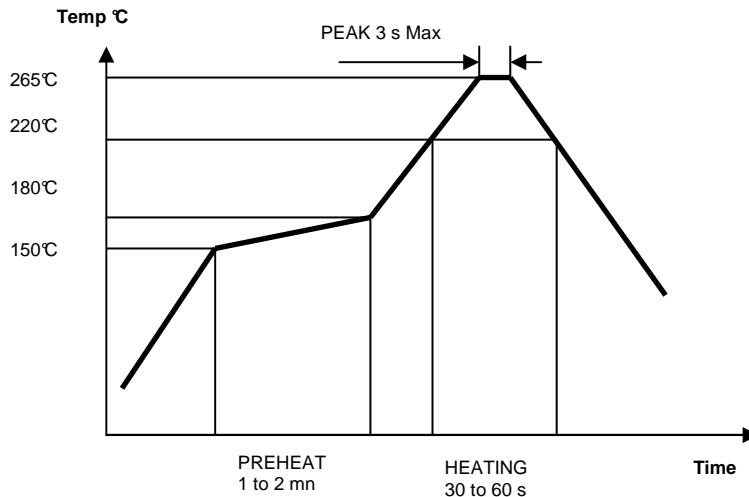


Thickness of printed solder: 0.15 mm

# High Voltage Chip Trim Ceramic Trimmer Capacitors AT 03HV00 SERIES

## SURFACE MOUNT TRIMMER CAPACITORS, ROHS COMPLIANT

**Recommended reflow solder temperature profile**  
**Maximum Soldering Temperature 265°C MAX**



### V. PACKAGING

Parts are delivered :

- on tape and reel in 12 mm width carrier tape in quantities of 1 kp on 7 inches reel
- in bulk for quantity lower than 1 kp

### VI. HOW TO ORDER

Parts on tape and reel :

**Reference** **R2** **RoHS**

Example

**AT 03HV03 R2 RoHS**

Parts in quantity < 1 kp

**Reference** **RoHS**

Example

**AT 03HV10 RoHS**

### VII. TUNING

Recommended Tuning Tool reference: AT 8777

When tuning, do not apply an axial force higher than 1.5 N (150 g)

### VIII. STORAGE CONDITIONS

Do not store components under direct sunlight or in dewy environment, and in corrosive condition. Before use, store components under condition of -10°C to +40°C and humidity of 75% RH Max. It is recommended to use components within 6 months after delivery

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