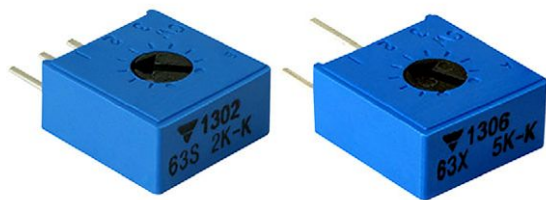


## 3/8" Square (10 mm) Single-Turn Cermet Trimmer



### FEATURES

- Arrow and graduations for repeatable settings
- "O" ring seal for solvent and aqueous washing
- Rigid board mounting achieved with pins secured in housing
- Multi-finger wiper for better contact resistance
- Solid end stop
- Tests according to CECC 41000 or IEC 60393-1
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

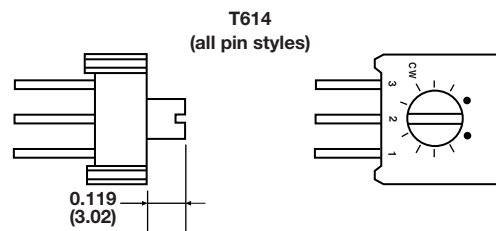
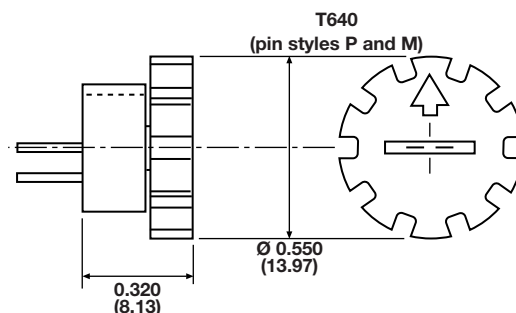
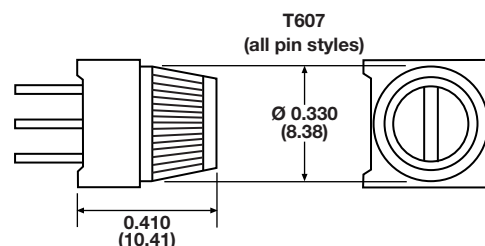
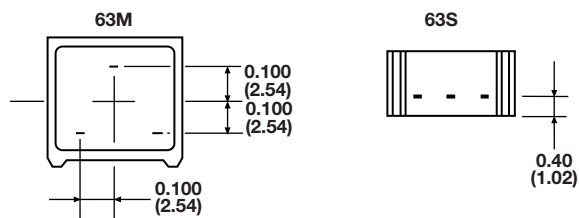
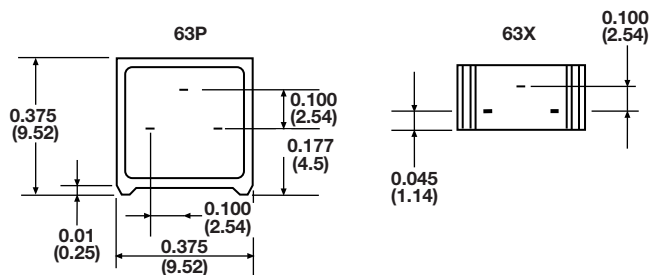
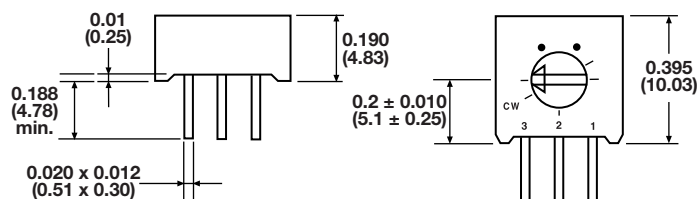
### DESIGN SUPPORT TOOLS

[click logo to get started](#)

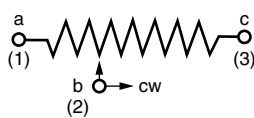
**3D**  
Models  
Available

The Model 63 cermet trimmer is available in several pin configurations for top or side adjustment and with a choice of Knob styles for finger setting. Quick adjustment is achieved with multi-finger wiper and the standard resistance range is between 100  $\Omega$  and 2 M $\Omega$  with a tolerance of  $\pm 10\%$ .

### DIMENSIONS in inches (millimeters) $\pm 0.02"$ (0.5 mm)



## ELECTRICAL SPECIFICATIONS

|                                                 |                                                                                          |
|-------------------------------------------------|------------------------------------------------------------------------------------------|
| Effective travel                                | 270° nominal                                                                             |
| Resistance range                                | 100 $\Omega$ to 2 M $\Omega$                                                             |
| Resistance tolerance                            | $\pm 10\%$                                                                               |
| End resistance                                  | 2 $\Omega$ or 1 % whichever is greater                                                   |
| Temperature coefficient of resistance (typical) | $\pm 100$ ppm/°C                                                                         |
| Power rating                                    | 0.5 W at +70 °C derated linearly to 0 W at 125 °C<br>maximum voltage not to exceed 250 V |
| Circuit diagram                                 |        |
| Dielectric withstand voltage                    | 1000 V <sub>AC</sub> at sea level; 250 V <sub>AC</sub> at 80 000 ft (24 000 m)           |
| Insulation resistance (500 V <sub>DC</sub> )    | 1000 M $\Omega$ minimum                                                                  |
| Contact resistance variation                    | 1 % or 1 $\Omega$ , whichever is greater                                                 |

## MECHANICAL SPECIFICATIONS

|                          |                                 |
|--------------------------|---------------------------------|
| Mechanical travel        | 300° $\pm$ 50                   |
| Starting torque          | 35 mNm max.                     |
| Weight                   | 0.03 oz. (0.85 g) max.          |
| Resistance element       | Cermet                          |
| 2 terminal adjustability | $\pm 0.15\%$ of RT              |
| 3 terminal adjustability | $\pm 0.05\%$ of applied voltage |
| Terminals                | Pure Sn (code e3)               |

## ENVIRONMENTAL SPECIFICATIONS

|                   |                   |
|-------------------|-------------------|
| Temperature range | -55 °C to +125 °C |
| Climatic category | 55/125/21         |
| Sealing           | IP64              |

## PERFORMANCES

| TESTS                  | CONDITIONS                            | MAX.<br>(R) | CHANGE PER CECC                  |               | PER IEC               | PER MIL    |
|------------------------|---------------------------------------|-------------|----------------------------------|---------------|-----------------------|------------|
|                        |                                       |             | V <sub>AB</sub> /V <sub>AC</sub> | 41100         |                       |            |
| Vibration              | 98 m/s <sup>2</sup> , 10 Hz to 500 Hz | 1 %         | 2 %                              | (PARA 2.3.2)  | Test FC (IEC 6-2-6)   | Method 204 |
| Electrical endurance   | 1000 h                                | 3 %         | -                                | (PARA 2.5.16) | -                     | No equiv.  |
| Soldering              | -                                     | -           | -                                | (PARA 2.3.7)  | Test TB (IEC 68-2-20) | Method 208 |
| Resistance to heat     | -                                     | 1 %         | -                                | (PARA 2.3.7)  | Test B (IEC 68-2-20A) | Method 210 |
| Damp heat steady state | 21 days                               | 3 %         | -                                | (PARA 2.1)    | Test C (IEC 68-2-3)   | Method 103 |
| Mechanical life        | 200 cycles                            | 3 %         | -                                | -             | Method 2              | -          |
| Terminal strength      | 2.2 lbs. (1 kg)                       | min.        | -                                | -             | -                     | -          |

### Note

- Nothing stated herein shall be construed as a guarantee of quality or durability

## MARKING

- Vishay trademark
- Model
- Resistance value
- Tolerance
- Date code
- Terminal identification

**PACKAGING**

- In box of 200 pieces code B40 (BO200)
- On request :
  - In box of 100 pieces code B30 (BO100)
  - In tube of 50 pieces code T20 (TU50)

**ORDERING INFORMATION (Part Number)**

|       |   |                  |   |                                                    |   |   |           |   |                                                                                     |   |   |                                                               |   |   |
|-------|---|------------------|---|----------------------------------------------------|---|---|-----------|---|-------------------------------------------------------------------------------------|---|---|---------------------------------------------------------------|---|---|
| M     | 6 | 3                | P | 2                                                  | 0 | 1 | K         | B | 4                                                                                   | 0 | T | 6                                                             | 0 | 7 |
| Model |   | STYLE            |   | OHMIC VALUE                                        |   |   | TOLERANCE |   | PACKAGING CODE                                                                      |   |   | SPECIAL NUMBER                                                |   |   |
| M63   |   | P<br>M<br>X<br>S |   | From<br>100 $\Omega$ to 2 M $\Omega$<br>201 = 200R |   |   | K = 10 %  |   | B40 = box 200 pieces<br>On request:<br>B30 = box 100 pieces<br>T20 = tube 50 pieces |   |   | (If applicable)<br>Given by<br>Vishay<br>for custom<br>design |   |   |

**DESCRIPTION (for information only)**

|       |       |       |           |         |           |             |
|-------|-------|-------|-----------|---------|-----------|-------------|
| 63    | P     | 200U  | 10 %      | T607    | BO200     | e3          |
| MODEL | STYLE | VALUE | TOLERANCE | SPECIAL | PACKAGING | LEAD FINISH |

**RELATED DOCUMENTS****APPLICATION NOTES**

|                                                                   |                                                                        |
|-------------------------------------------------------------------|------------------------------------------------------------------------|
| Potentiometers and Trimmers                                       | <a href="http://www.vishay.com/doc?51001">www.vishay.com/doc?51001</a> |
| Guidelines for Vishay Sfernice Resistive and Inductive Components | <a href="http://www.vishay.com/doc?52029">www.vishay.com/doc?52029</a> |

# Mouser Electronics

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[M63P105KB30T607](#) [M63P202KB30T607](#) [M63P203KB30T607](#) [M63P205KB30T607](#) [M63P502KB30T607](#)  
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