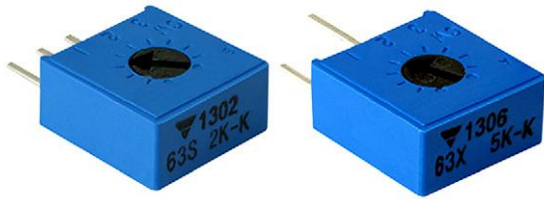


# 3/8" Square (10 mm) Single-Turn Cermet Trimmer



## 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)



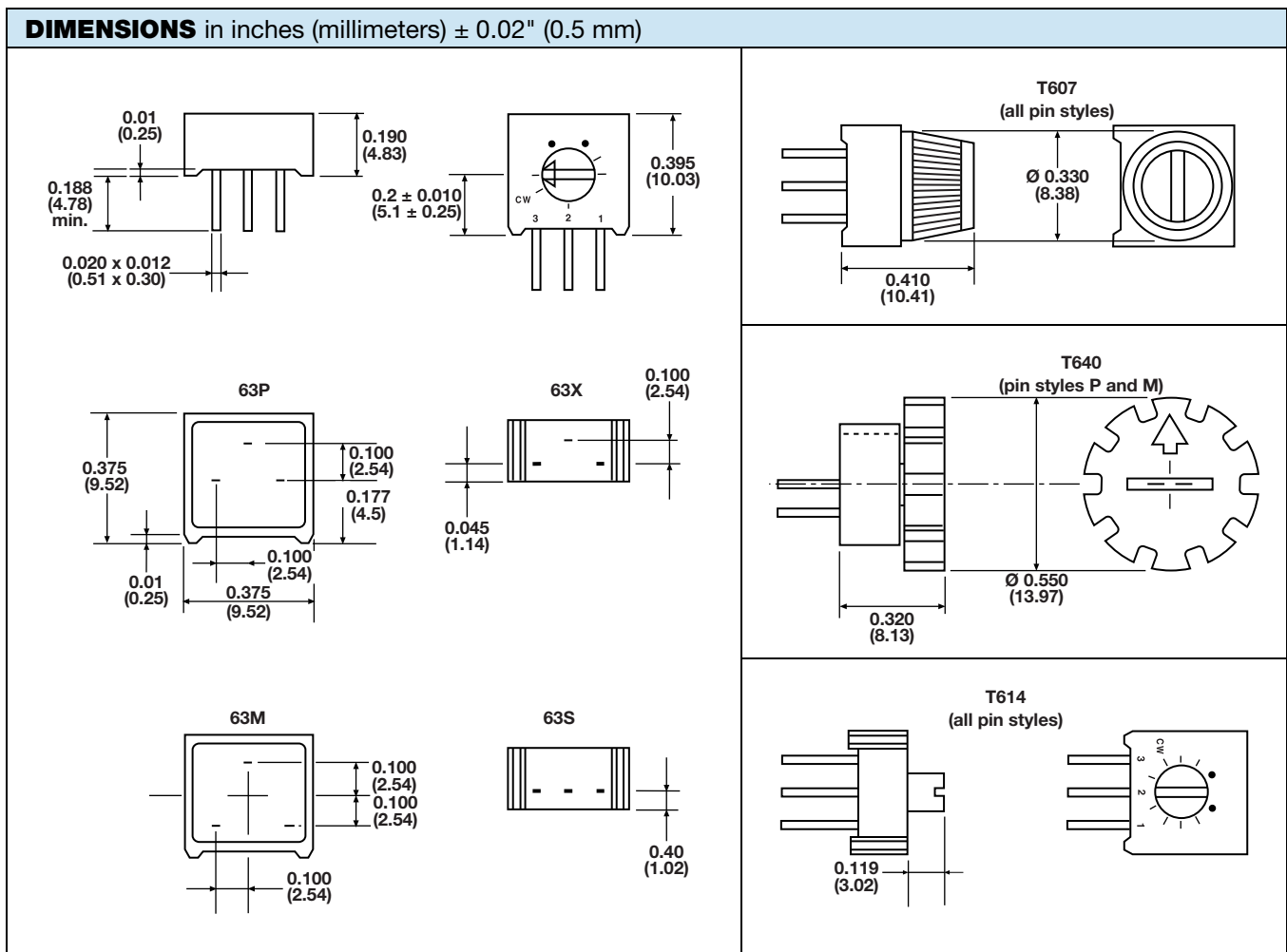
RoHS COMPLIANT

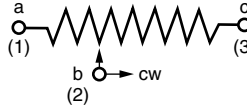
## DESIGN SUPPORT TOOLS

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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 Ω and 2 MΩ with a tolerance of ± 10 %.



| <b>ELECTRICAL SPECIFICATIONS</b>                |  |
|---|--|
| Effective travel                                | 270° nominal   |
| Resistance range                                | 100 Ω to 2 MΩ  |
| Resistance tolerance                            | ± 10 %   |
| End resistance                                  | 2 Ω or 1 % whichever is greater  |
| Temperature coefficient of resistance (typical) | ± 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 MΩ minimum  |
| Contact resistance variation                    | 1 % or 1 Ω, whichever is greater   |

| <b>MECHANICAL SPECIFICATIONS</b> |                             |
|----------------------------------|-----------------------------|
| Mechanical travel                | 300° ± 50                   |
| Starting torque                  | 35 mNm max.                 |
| Weight                           | 0.03 oz. (0.85 g) max.      |
| Resistance element               | Cermet                      |
| 2 terminal adjustability         | ± 0.15 % of RT              |
| 3 terminal adjustability         | ± 0.05 % of applied voltage |
| Terminals                        | Pure Sn (code e3)           |

| <b>ENVIRONMENTAL SPECIFICATIONS</b> |                   |
|-------------------------------------|-------------------|
| Temperature range                   | -55 °C to +125 °C |
| Climatic category                   | 55/125/21         |
| Sealing                             | IP64              |

| <b>PERFORMANCES</b>    |                                       |          |                                  |               |                       |            |
|------------------------|---------------------------------------|----------|----------------------------------|---------------|-----------------------|------------|
| TESTS                  | CONDITIONS                            | MAX. (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

| <b>MARKING</b>   |
|--|
| <ul style="list-style-type: none"> <li>• Vishay trademark</li> <li>• Model</li> <li>• Resistance value</li> <li>• Tolerance</li> <li>• Date code</li> <li>• Terminal identification</li> </ul> |



| PACKAGING  |
|--|
| <ul style="list-style-type: none"> <li>In box of 200 pieces code B40 (BO200)</li> <li>On request :               <ul style="list-style-type: none"> <li>In box of 100 pieces code B30 (BO100)</li> <li>In tube of 50 pieces code T20 (TU50)</li> </ul> </li> </ul> |

| 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 Ω to 2 MΩ<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   |  |
|---|--|
| <b>APPLICATION NOTES</b>  |  |
| 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> |