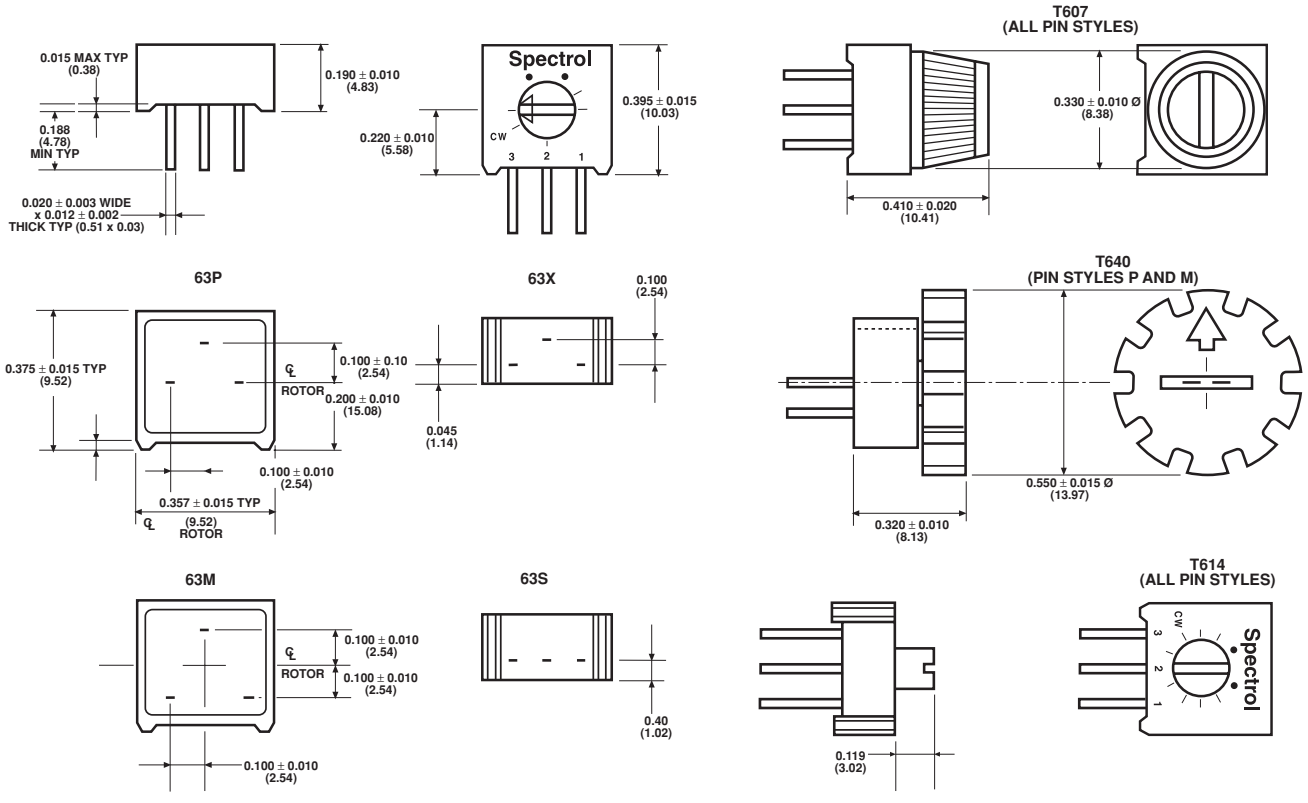
# 3/8” Square (10mm) Single-Turn Cermet Trimmer

The Model 63 cermet trimmer manufactured in Europe is readily 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 10Ω and 2 MΩ with a tolerance of ± 10%. This sealed (IEC 68-2-17) single turn trimmer is continuing to provide excellent performance as the industry standard across a broad spectrum of applications.

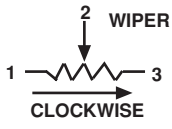
## FEATURES

- Arrow and Graduations for Repeatable Settings
- “O” Ring Seal for Solvent and Aqueous Washing
- I.C. Style Pins for Easy PCB Assembly
- Rigid Board Mounting Achieved with Pins Secured in Housing
- Solder Plated Terminals for Good Solderability
- High Temperature Soldered Terminations for High Reliability
- Multi-finger Wiper for Better contact resistance
- Solid End Stop
- Flame Retardant Housing to UL Rated VO

**DIMENSIONS** in inches (millimeters)




**TOLERANCES: ± 0.015 (0.38) EXCEPT WHERE NOTED**



| ELECTRICAL SPECIFICATIONS | |
|---|---|
| **Effective Travel** | 270° nominal |
| **Resistance Range** | 10Ω to 2MΩ |
| **Resistance Tolerance** | ± 10% |
| **End Resistance** | 2Ω or 1%, whichever is greater |
| **Temperature Coefficient of Resistance** | 100ppm/°C. 100Ω thru to 2MΩ<br>0 to + 250ppm/°C below 100Ω |
| **Power Rating** | 0.5 watts at 70°C derated linearly to zero watts at 125°C<br>Maximum voltage not to exceed 300V |
| **Dielectric Withstanding Voltage** | 1000VAC at sea level; 250VAC at 80,000 ft (24,000 meters) |
| **Insulation Resistance** | 1000MΩ minimum |
| **Contact Resistance Variation** | 1% or 1Ω, whichever is greater |

| MECHANICAL SPECIFICATIONS | |
|---|---|
| **Stop Strength** | Solid |
| **Starting Torque** | 35mNm maximum |
| **Weight** | 0.03oz (0.85grams) maximum |
| **Resistance Element** | Cermet |
| **2 Terminal Adjustability** | ± 0.15% of RT |
| **3 Terminal Adjustability** | ± 0.05% of applied voltage |

**ENVIRONMENTAL SPECIFICATIONS**

| | | MAX (R) | CHANGE PER CECC | | PER IEC 68.1 PART 1202F | PER MIL |
|---|---|---|---|---|---|---|
| | | | $\frac{V_{AB}}{V_{AC}}$ | 41100 | | |
| **Temperature Range** | - 55°C to + 125°C | 2% | 1% | (PARA 2.3.6) | TEST NA (IEC 68 - 2 - 14) | METHOD 107 |
| **Bumps** | 390m/s$^2$, 4000 | 1% | – | (PARA 2.3.3) | TEST EB (IEC 68 - 2 - 29) | NO EQUIV |
| **Vibration** | 98m/s$^2$, 10 to 500 Hz | 1% | 2% | (PARA 2.3.2) | TEST FC (IEC 68 - 2 - 6) | METHOD 204 |
| **Electrical Endurance** | 1000 Hour | 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 TB (IEC 68 - 2 - 20A) | METHOD 210<br>METHOD 1A |
| **Damp Heat Steady State** | 21 Days | 3% | – | (PARA 2.1) | TEST C (IEC 68 - 2 - 3) | METHOD 103 |
| **Sealing** | 85°C for 1 minimum | – | – | AS IEC | TEST QC (IEC 68 - 2 - 17) | METHOD 112 |
| **Mechanical Life** | 200 Cycles | 3% | – | – | METHOD 2 | – |
| **Terminal Strength** | 2.2lbs (1Kg) | min | – | – | – | – |

## MARKING

Unit Identification: Manufacture’s name and model number, resistance value, tolerance, date code and terminal identification

## ORDERING INFORMATION

| 63 | P | T607 | 201 |
|---|---|---|---|
| MODEL | PIN STYLE | SPECIAL (OMIT IF STANDARD) | EIA RESISTANCE VALUE |
| | P, M, X, S | **T607** - Knob adjust (see drawing)<br>**T640** - Knob adjust (see drawing)<br>**T614** - Extended rotor (see drawing) | |

## SAP PART NUMBERING GUIDELINES

| M | 6 | 3 | P | 2 | 0 | 1 | K | B | 4 | 0 | T | 6 | 0 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | | | STYLE | OHMIC VALUE | | | TOL | PACKAGING CODE | | | SPECIAL (IF APPLICABLE) | | | |

See the end of this data book for conversion tables