

## Specifications for Surface Mount Single-Turn Trimmers

| Series                        | VG026 Series                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VG039N Series                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Examples                |                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                           |
| Features                      | <ul style="list-style-type: none"> <li>■ 2mm Surface Mount, Single-Turn, Cermet Trimmers</li> <li>■ Low Profile, 0.8mm in Height</li> <li>■ First in Industry: Resin Sealed Insulation Area on Mounting Surface to Eliminate Rerouting Traces</li> <li>■ Stable Performance in Adverse Ambient Conditions</li> <li>■ 8mm Embossed Tape for Automatic Insertion</li> <li>■ Recommended for Reflow Soldering</li> <li>■ <b>RoHS Compliant:</b> Pb-Free and Cd-Free</li> </ul> | <ul style="list-style-type: none"> <li>■ 3mm Surface Mount, Single-Turn, Cermet Trimmers</li> <li>■ Low Profile, 1.2mm in Height</li> <li>■ First in Industry: Resin Sealed Insulation Area on Mounting Surface to Eliminate Rerouting Traces</li> <li>■ Stable Performance in Adverse Ambient Conditions</li> <li>■ 8mm Embossed Tape for Automatic Insertion</li> <li>■ Recommended for Reflow Soldering</li> <li>■ <b>RoHS Compliant:</b> Pb-Free and Cd-Free</li> </ul> |
| Nominal Size and Construction | 2.2mm x 2.6mm x 0.8mm in height<br>Open Frame, Surface Mount                                                                                                                                                                                                                                                                                                                                                                                                                | 3mm x 3.8mm x 1.2mm in height<br>Open Frame, Surface Mount                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Resistive Element             | Cermet                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Cermet                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Adjustment Travel             | Single-Turn: 240° ± 20°                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Single-Turn: 270° ± 20°                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Adjustment Type               | Top Adjust<br>Flush Cross-Slot                                                                                                                                                                                                                                                                                                                                                                                                                                              | Top Adjust<br>Flush Cross-Slot with Rotational Stops                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Terminal Style                | Surface Mount<br>Triangular Footprint                                                                                                                                                                                                                                                                                                                                                                                                                                       | Surface Mount<br>Triangular Footprint                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Resistance Range              | 100Ω to 1MΩ (1, 2, 3, 5 Sequence)                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100Ω to 1MΩ (1, 2, 3, 5 Sequence)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Resistance Tolerance          | ± 25%                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ± 25%                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Power Rating                  | 0.1 W at +70°C<br>0 W at +100°C                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.15 W at +70°C<br>0 W at +100°C                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Maximum Working Voltage       | 50V                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50V or $\sqrt{PR} = V$ ,<br>whichever is smaller                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Temperature Range             | – 40°C to +100°C                                                                                                                                                                                                                                                                                                                                                                                                                                                            | – 40°C to +100°C                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Temperature Coefficient       | ± 250 ppm/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ± 250 ppm/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating Torque              | 0.49 – 7.84 mN•m (5 – 80 gf•cm)                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.98 – 11.76 mN•m (10 – 120 gf•cm)                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Standard Nominal Resistance Values with Ordering Codes

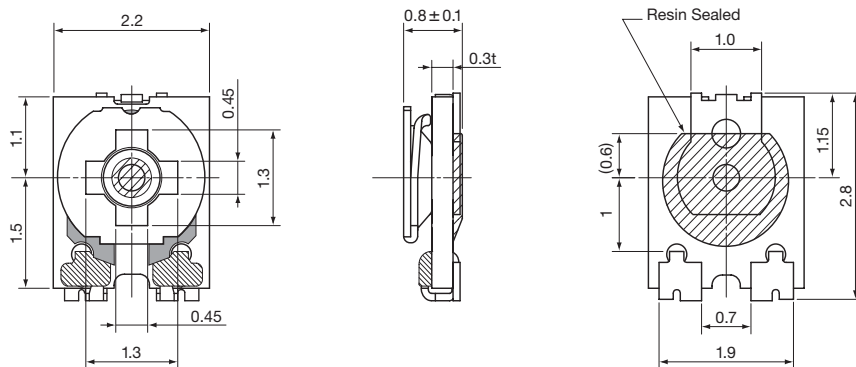
| Standard Nominal Resistances and Ordering Codes | Resistance (Ω) | Code | Resistance (Ω) | Code | Resistance (Ω) | Code | Resistance (Ω) | Code |
|-------------------------------------------------|----------------|------|----------------|------|----------------|------|----------------|------|
|                                                 | 100            | 101  | 1,000          | 102  | 10,000         | 103  | 100,000        | 104  |
|                                                 | 200            | 201  | 2,000          | 202  | 20,000         | 203  | 200,000        | 204  |
|                                                 | 300            | 301  | 3,000          | 302  | 30,000         | 303  | 300,000        | 304  |
|                                                 | 500            | 501  | 5,000          | 502  | 50,000         | 503  | 500,000        | 504  |
|                                                 | —              | —    | —              | —    | —              | —    | 1,000,000      | 105  |

## Dimensions for Surface Mount Single-Turn Trimmers

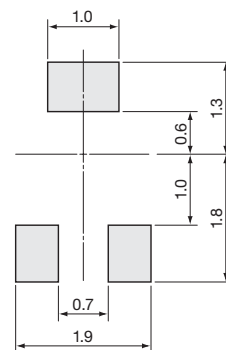
### VG026

2mm Surface Mount, Cross-Slot, Single-Turn

Unit: mm



### Recommended Land Pattern



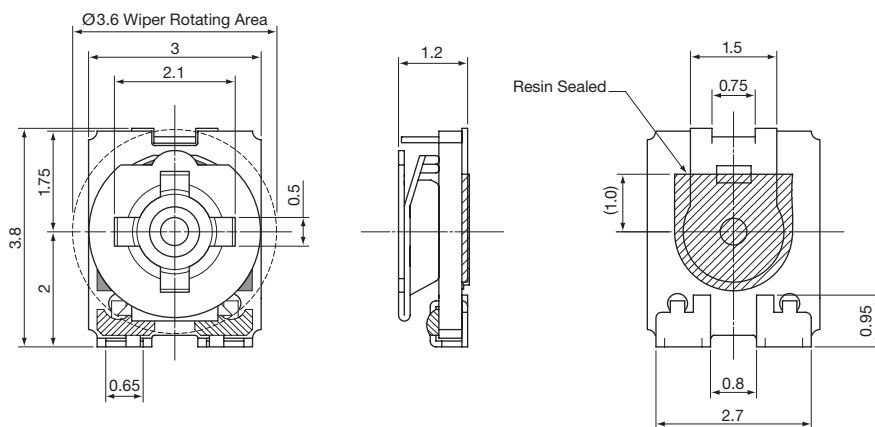
### Packaging

8mm Embossed Tape; 3,000 Pieces Per Ø180 mm Reel

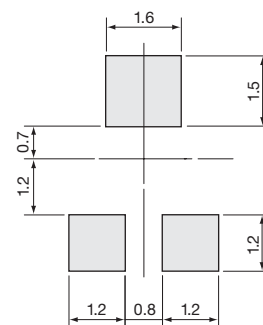
□ Solder Pads

### VG039N

3mm Surface Mount, Cross-Slot, Single-Turn



### Recommended Land Pattern



### Packaging

8mm Embossed Tape; 2,500 Pieces Per Ø180 mm Reel

□ Solder Pads

## Part Numbering System for Surface Mount VG026 and VG039N

**VG 026 CH XT B 102**

Resistance Code: Expressed in ohms. A three digit code where the first two digits are significant figures, and the third digit indicates the number of zeros that follow these figures (i.e., 100 = 100Ω; 101 = 100Ω; 102 = 1,000Ω; 105 = 1,000,000Ω).

Resistance Taper: B = Linear.

Packaging: XT = Tape; Blank = Bulk.

Design Type: Surface Mount Chip.

Size: 026 = 2mm; 039N = 3mm (See Dimensions).

TOCOS Series: VG = Cermet.