

## Type 3240 Series

### Key Features

- Full Ten Turns
- Fully Sealed
- Wave and Reflow Solder
- Only 4mm Square
- Flush Adjustment Screws
- Top or Low Profile Styles
- Tape and Reeled (EIJ Std Reels)
- Smooth Top - Good Pickup



TE Connectivity (TE) are pleased to introduce this tiny (4mm square) multiturn trimmer potentiometer. The 3240 Series is designed with a footprint meeting EIA and other international board layout standards. It is also compatible with all surface mount manufacturing processes. It is ideally suited to small sensors where its 10 turn setability and small size enables it to stand out from most other competitors.

### Characteristics - Electrical

|  |   |
|--|---|
| <b>Resistance Range:</b>                 | 10R to 2M 1, 2, 5 in each decade          |
| <b>Resistance Tolerance:</b>             | ±10%                                      |
| <b>Power Rating (300 volts maximum):</b> | 0.25Watts at 85°C, derating to 0 at 150°C |
| <b>Absolute Minimum Resistance:</b>      | 1% or 2 ohms, (whichever is greater)      |
| <b>Contact Resistance Variation:</b>     | 1% or 3 ohms, (whichever is greater)      |
| <b>Resolution:</b>                       | Essentially infinite                      |
| <b>Insulation Resistance:</b>            | 1000 Meg ohms minimum at 500V DC          |
| <b>Dielectric Strength (Sea Level):</b>  | 600 V AC (1 minute)                       |
| <b>Electrical Angle:</b>                 | 10 turns nominal                          |

### Characteristics - Mechanical

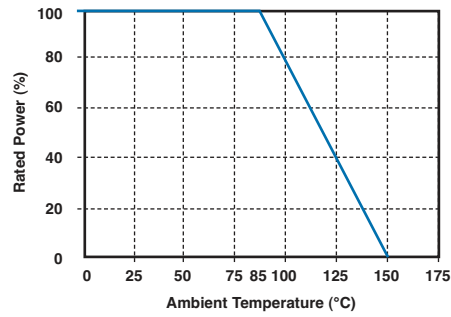
|                          |  |
|--------------------------|--|
| <b>Mechanical Angle:</b> | 12 turns nominal   |
| <b>Operating Torque:</b> | 20 mNm maximum   |
| <b>Mechanical Stop:</b>  | Wiper Idles  |
| <b>Weight:</b>           | 0.2 gram approximately   |
| <b>Packaging:</b>        | 500 pieces on 7" Reel (P Style)<br>250 pieces on 7" Reel (W Style) |

### Characteristics - Environmental

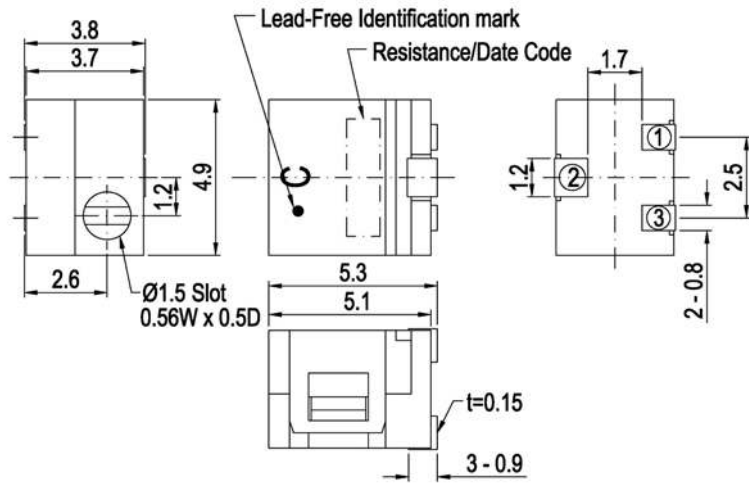
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|---------------------------------|--|
| <b>Soldering Heat:</b>          | 260°C for 5 - 6 seconds, $\Delta R < \pm 1\%$                            |
| <b>Temperature Range:</b>       | -65°C to +150°C  |
| <b>Temperature Coefficient:</b> | ±100ppm/°C   |
| <b>Humidity:</b>                | -10°C – +65°C, 80 - 98% RH 10 cycles,<br>240 hours $\Delta R < \pm 2\%$  |
| <b>Vibration:</b>               | 20G $\Delta R < 1\%$   |
| <b>Shock:</b>                   | 100G $\Delta R < \pm 1\%$  |
| <b>Load Life:</b>               | @ 85°C rated power 1000 hours TRS 2 ohms<br>or 2% (whichever is greater) |
| <b>Rotational Life:</b>         | 200 cycles $\Delta R < \pm 3\%$ or 3 ohms<br>(whichever is greater)      |
| <b>Thermal Shock:</b>           | 5 cycles, -65°C to +150°C, $\Delta R < \pm 2\%$                          |

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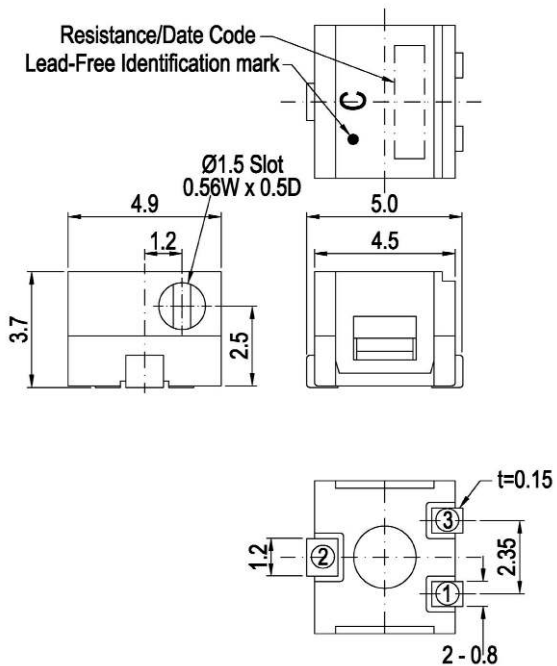
### Derating Curve



### Dimensions - 3240W

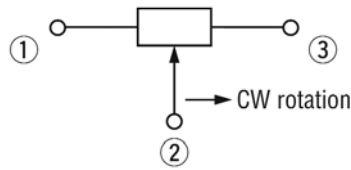


### 3240P

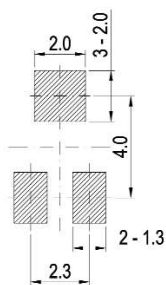


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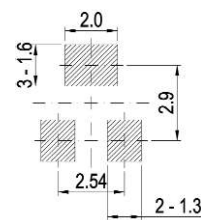
### Schematic Diagram



### Substrate Layout - 3240P



### 3240W



### Application Notes - Pick Up Nozzle

The nozzle inside diameter should not exceed 4.27mm to assure adequate suction and part alignment.

### Cleaning Conditions

After soldering use cleaning solvents such as water or alcohol, but not solvents such containing CFC's.

### Storage

To prevent damage to the electrode, be sure to observe the following conditions for storage.

- 1 Store in 25°C maximum ambient temperature, and 75% maximum ambient RH.
- 2 For maximum possible shelf life do not disturb polythene sleeve until you are ready to use potentiometers – recommend use within one year of delivery.
- 2 Store where there are no harmful gasses containing sulphur or chlorine.
- 3 Do not expose to direct sunlight and dust.

### How to Order

| 3240                         | W   | 102   | K                |
|------------------------------|---|---|------------------|
| <b>Common Part</b>           | <b>Orientation</b>                        | <b>Resistance Value</b>   | <b>Tolerance</b> |
| 3240 – 4mm Multiturn Trimmer | W – Top Adjustment<br>P – Side Adjustment | The first two digits are significant figures of resistance value and the third denotes the number of zeros following.<br><br>e.g. 100R: 101<br>1K: 102<br>10K: 103<br>100K: 104 | K - 10 %         |

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