

## Type 3240 Series

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Tyco Electronics 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.

### 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

### Characteristics - Electrical

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

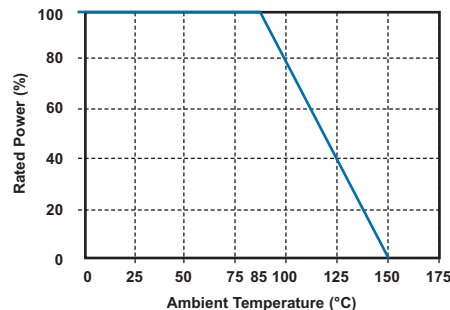
### Characteristics - Mechanical

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

### Characteristics - Environmental

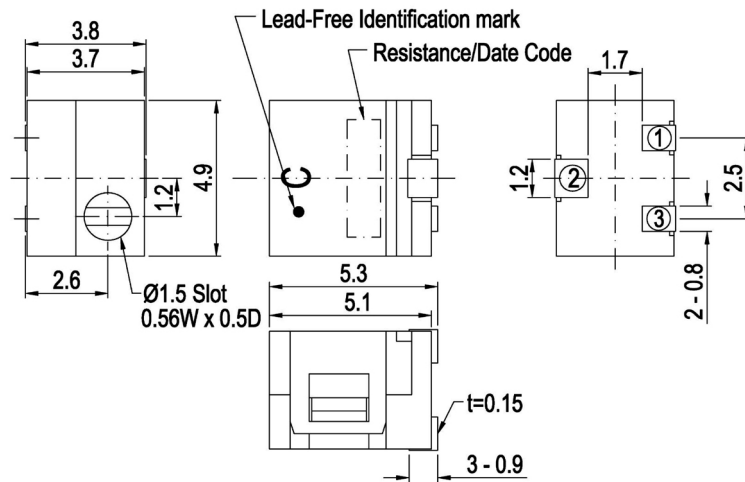
Soldering Heat:	260°C for 5 - 6 seconds, $\Delta R < \pm 1\%$
Temperature Range:	-65°C to +150°C
Temperature Coefficient:	±100ppm/°C
Humidity:	-10°C – +65°C, 80 - 98% RH 10 cycles, 240 hours $\Delta R < \pm 2\%$
Vibration:	20G $\Delta R < 1\%$
Shock:	100G $\Delta R < \pm 1\%$
Load Life:	@ 85°C rated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

### Derating Curve

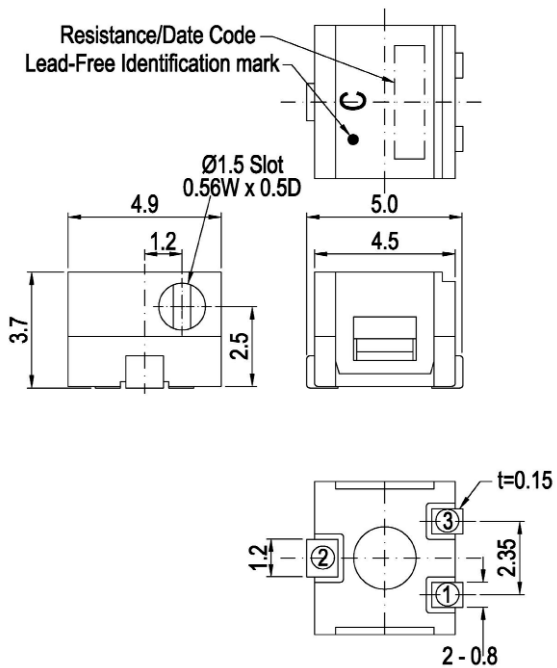


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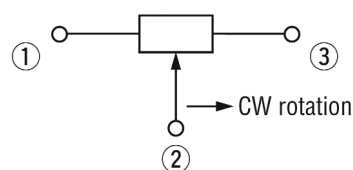
**Dimensions - 3240W**



**3240P**

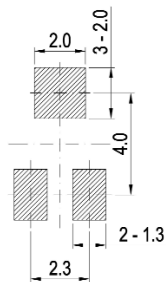


**Schematic Diagram**

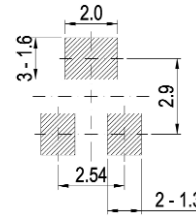


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Substrate Layout -  
3240P



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 P – Side Adjustment	The first two digits are significant figures of resistance value and the third denotes the number of zeros following.  e.g. 100R: 101 1K: 102 10K: 103 100K: 104	K - 10 %