

## SMD Economy Trimmers

### Type 3165 Series

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These cermet element surface mount trimmers feature a cross-slot adjustment head with unbroken perimeter for ease of vacuum pick up and auto adjustment.

Available in two and three terminal styles these 4mm trimmers are supplied on standard 12mm blister tape and are suitable for all reflow soldering processes.

#### Key Features

- Stable Cermet Element
- Choice of Orientation Options
- Available on Standard 12mm Tape
- Lightweight - Only 0.2 Grams
- New Style Cross Slot Adjust
- Low Price Reduces Production Costs
- Small Compact Size (4mm Square)
- 2 and 3 Terminal Options

#### Characteristics - Electrical

Resistance Range:	100R to 1M
Resistance Values:	1, 2 & 5 in each decade
Resistance Tolerance:	± 25%
Resistance Law:	Linear
Temperature Coefficient of Resistance:	± 250ppm/°C at -25°C to +85°C
Operating Voltage:	50 V maximum
Resolution:	Infinite
Contact Resistance Variation:	<5% of Nominal Value
Power Rating:	0.15 Watts @ 70°C
Electrical Rotation:	270° ±10°

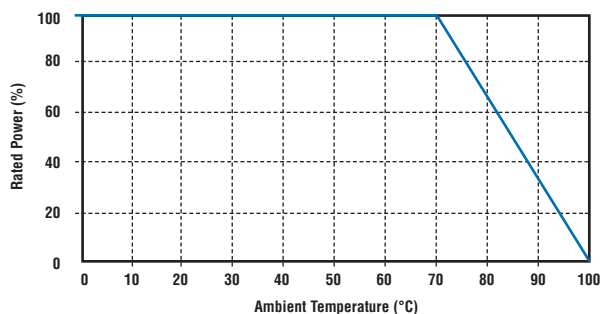
#### Characteristics - Mechanical

Rotation Torque:	2.0 - 20 mNm
Weight:	0.2 grams

#### Characteristics - Environmental

Operating Temperature Range:	-25°C to +85°C
Storage Temperature:	500 hours at 70°C
Humidity Load Life:	350 hours ΔR ± 5% 40°C RH 90-95%
Load Life:	1000 hours ΔR ± 5% @ 70°C
Effect of Soldering:	250°C ±10°C 3 seconds ΔR ± 3%
Rotational Life:	10 cycles ΔR ± 15%

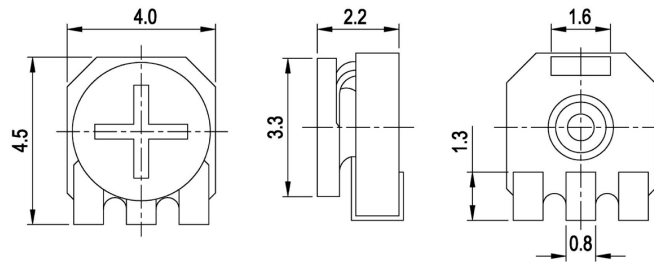
#### Derating Curve



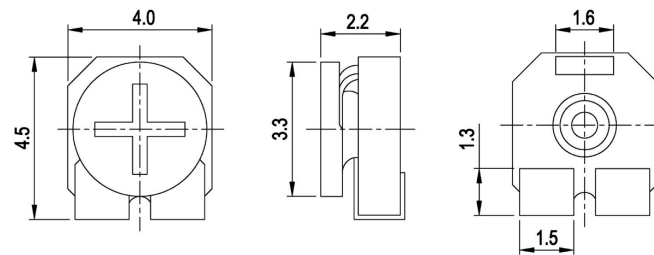
When the ambient temperature exceeds 70°C, reduce the rated power and current in accordance with the derating curve given

**Type 3165 Series**

**Dimensions  
3165**



**3166**



**Application Notes -  
Storage**

To prevent damage to the electrode, be sure to observe the following cautions for storage.  
 Store in 40°C maximum ambient temperature and 70°C maximum ambient RH.  
 For maximum possible shelf life do not disturb polythene sleeve until you are ready to use potentiometers.  
 Store where there are no harmful gases containing sulphur or chlorine.

**How to Order**

3165	W	102	P
<b>Common Part</b>	<b>Orientation</b>	<b>Resistance Value</b>	<b>Tolerance</b>
3165 - 3 Terminals Inline  3166 - 2 Terminals Delta Configuration	W - Terminals 1 and 3 towards the sprockets holes	The first two digits are significant figures of resistance value and the third denotes the number of zeros following.  e.g. 100R: 101 1K0: 102 10K: 103	P - 25 %