



## Features

- Surface Mount 3 mm Square / Multiturn Cermet / Industrial / Sealed
- Sealed to withstand standard board wash processing
- Pick and place centering design for automated placement compatibility
- Flush adjustment screw
- Meets EIA/EIAJ/IPC/VECI SMD standard trimmer footprint
- Top and side adjust
- RoHS compliant\* - see [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

## 3223 - 3 mm SMD Trimpot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range ..... 10 ohms to 2 megohms  
(see standard resistance table)  
Resistance Tolerance .....  $\pm 20\%$  std.  
Absolute Minimum Resistance ..... 1 % or 3 ohms max.  
(whichever is greater)  
Contact Resistance Variation ..... 3 % or 3 ohms max.  
(whichever is greater)  
Resolution ..... Essentially infinite  
Insulation Resistance ..... 500 VDC  
100 megohms min.  
Dielectric Strength  
Sea Level ..... 600 VAC (1 minute)  
Adjustment Angle ..... 11 turns nom.

### Environmental Characteristics

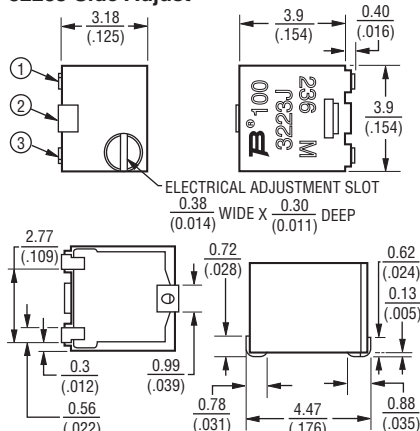
Power Rating (200 volts max.)  
70 °C ..... 0.125 watt  
150 °C ..... 0 watt  
Temperature Range ... -65 °C to +150 °C  
Temperature Coefficient ...  $\pm 100$  ppm/°C  
Seal Test .. 85 °C Fluorinert™/60 seconds  
Humidity ..... MIL-STD-202 Method 106  
TRS  $\pm 3\%$ ; IR 10 megohms  
Vibration ..... 20 G TRS  $\pm 1\%$ ; VRS  $\pm 1\%$   
Shock ..... 100 G TRS  $\pm 1\%$ ; VRS  $\pm 1\%$   
Load Life  
.....@ 70 °C rated power 1000 hours  
CRV ..... 4 ohms or 4 %  
(whichever is greater)  
Rotational Cycling ..... 200 cycles  
CRV ..... 4 ohms or 4 %  
(whichever is greater)  
Thermal Shock ..... 5 cycles  
TRS  $\pm 2\%$ ; VRS  $\pm 2\%$

### Physical Characteristics

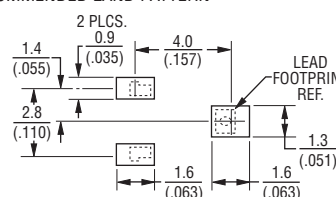
Mechanical Stop ..... Wiper idles  
Torque ..... 2.50 oz-in. max  
Weight ..... Approximately 0.01 oz.  
Marking ..... Manufacturer's code,  
resistance code and date code  
Solderability ..... Per MIL-STD-202,  
Method 208  
Wiper ..... 50 % (Actual TR)  $\pm 10\%$   
Flammability ..... UL94V-0  
Adjustment Tool ..... H-92-1

### Product Dimensions

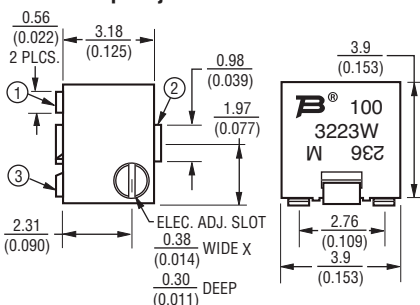
#### 3223J Side Adjust



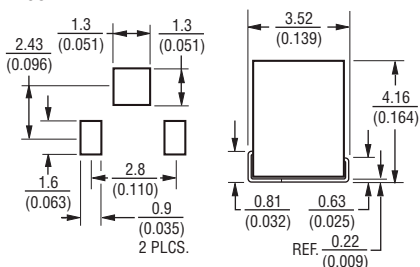
#### RECOMMENDED LAND PATTERN



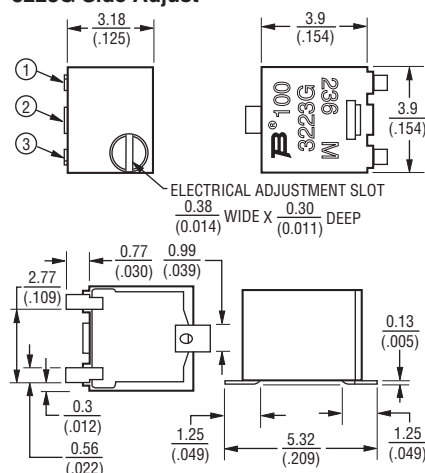
#### 3223W Top Adjust



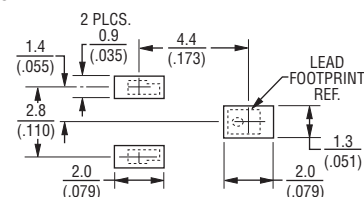
#### RECOMMENDED LAND PATTERN



#### 3223G Side Adjust

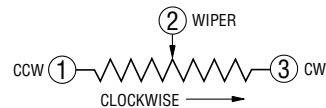


#### RECOMMENDED LAND PATTERN



DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

TOLERANCES:  $\frac{0.25}{(.010)}$  EXCEPT WHERE NOTED



### How To Order

**3223 W - 1 - 502 E**

Model \_\_\_\_\_  
Style \_\_\_\_\_  
Standard Product Indicator \_\_\_\_\_  
-1 = IR Reflow (Standard)  
Resistance Code \_\_\_\_\_  
Embossed Tape Designator \_\_\_\_\_  
E = 500 pcs./7 " Reel (Standard)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

†"Fluorinert" is a registered trademark of 3M Co.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

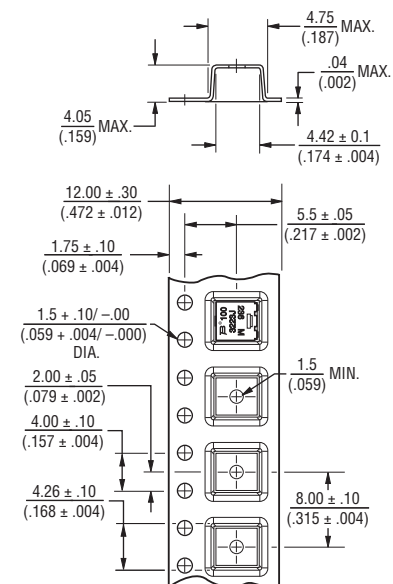
Users should verify actual device performance in their specific applications.

# 3223 - 3 mm SMD Trimpot® Trimming Potentiometer

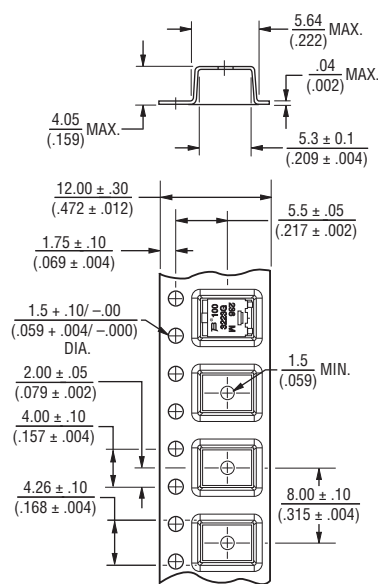
**BOURNS®**

## Packaging Specifications

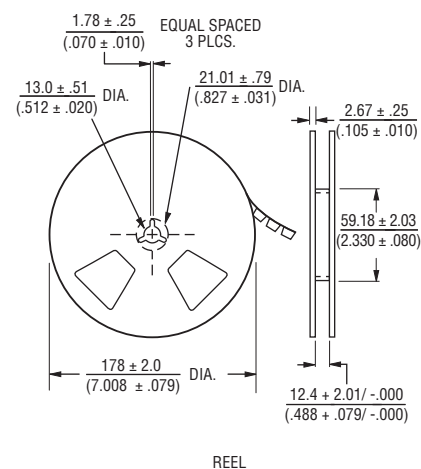
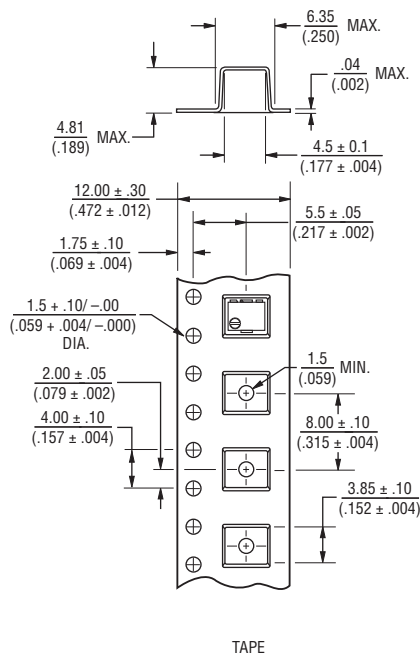
### J Style



### G Style



### W Style



Cover tape peel strength: Meets EIA specification 481.

DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

## Standard Resistance Table

| Resistance (Ohms) | Resistance Code |
|-------------------|-----------------|
| 10                | 100             |
| 20                | 200             |
| 50                | 500             |
| <b>100</b>        | <b>101</b>      |
| <b>200</b>        | <b>201</b>      |
| <b>500</b>        | <b>501</b>      |
| <b>1,000</b>      | <b>102</b>      |
| <b>2,000</b>      | <b>202</b>      |
| <b>5,000</b>      | <b>502</b>      |
| <b>10,000</b>     | <b>103</b>      |
| <b>20,000</b>     | <b>203</b>      |
| <b>50,000</b>     | <b>503</b>      |
| <b>100,000</b>    | <b>104</b>      |
| 200,000           | 204             |
| 500,000           | 504             |
| 1,000,000         | 105             |
| 2,000,000         | 205             |

Popular values listed in boldface. Consult factory for special resistances.

REV. 08/14

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