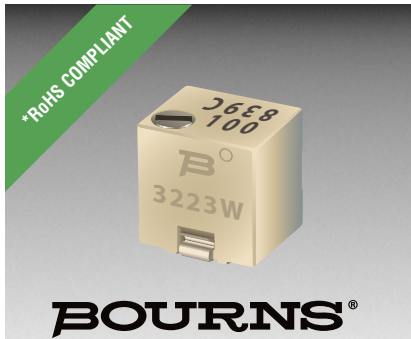




**THE DATASHEET OF**  
**3223W-1-102E**





## 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 ..... ±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

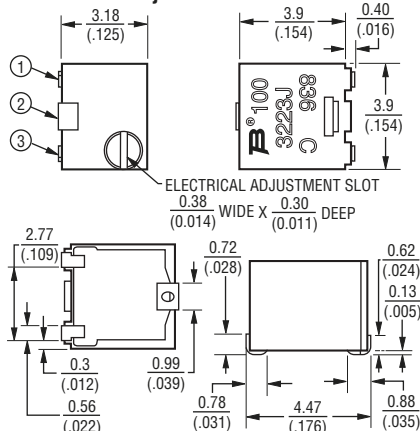
Power Rating (200 volts max.)  
 70 °C ..... 0.125 watt  
 150 °C ..... 0 watt  
 Temperature Range ... -65 °C to +150 °C  
 Temperature Coefficient ... ±100 ppm/°C  
 Seal Test ..85 °C Fluorinert 1/60 seconds  
 Humidity ..... MIL-STD-202 Method 106  
 TRS ±3 %; IR 10 megohms  
 Vibration ..... 20 G TRS ±1 %; VRS ±1 %  
 Shock ..... 100 G TRS ±1 %; VRS ±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 ±2 %; VRS ±2 %  
 Moisture Sensitivity Level..... 2  
 ESD Classification ..... 2

### Physical Characteristics

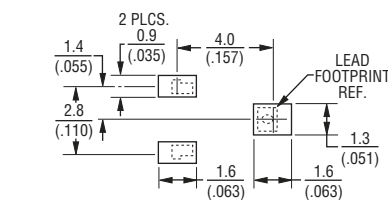
Mechanical Stop ..... Wiper idles  
 Torque..... 2.50 oz-in. max  
 Weight ..... Approximately 0.01 oz.  
 Marking ..... Manufacturer's code,  
 resistance code and date code  
 Solderability..... Per MIL-STD-202,  
 Method 208  
 Wiper ..... 50 % (Actual TR) ±10 %  
 Flammability ..... UL94V-0  
 Adjustment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

### Product Dimensions

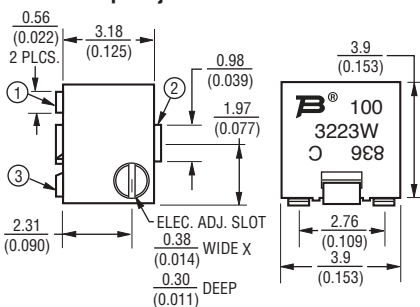
#### 3223J Side Adjust



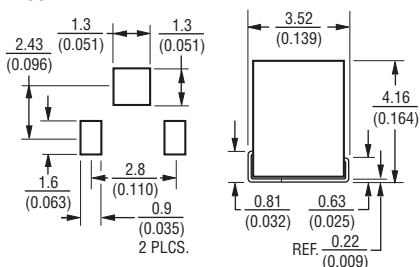
#### RECOMMENDED LAND PATTERN



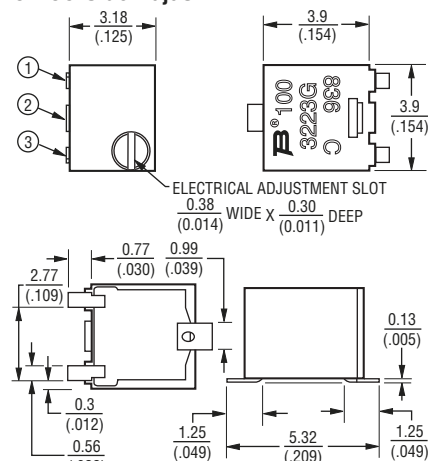
#### 3223W Top Adjust



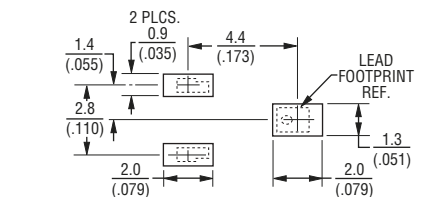
#### RECOMMENDED LAND PATTERN



#### 3223G Side Adjust

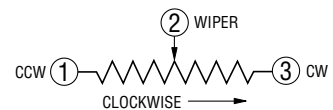


#### RECOMMENDED LAND PATTERN



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)  
 Tape and reel material meets Antistatic ANSI/  
 ESD 5541-2003 packaging standards.



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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.

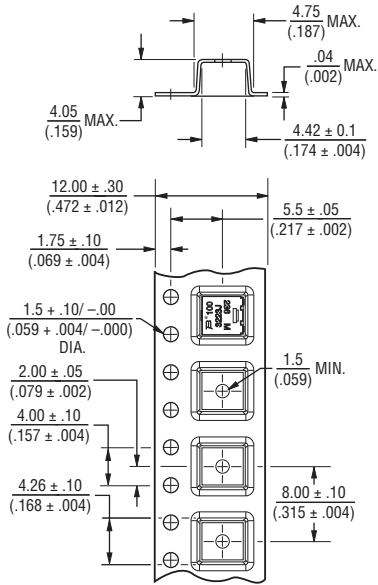
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# 3223 - 3 mm SMD Trimpot® Trimming Potentiometer

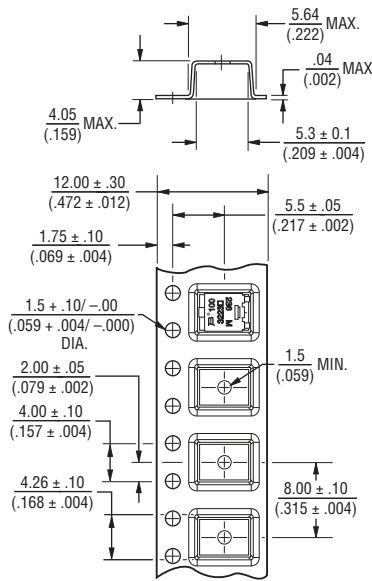
**BOURNS®**

## Packaging Specifications

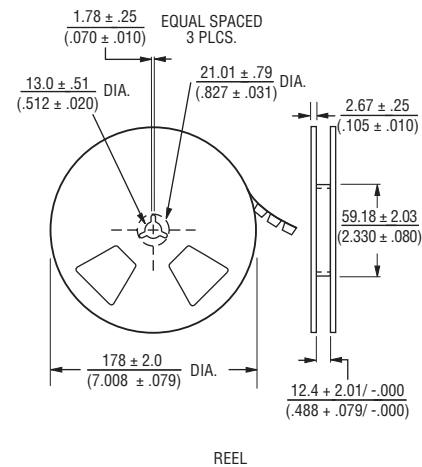
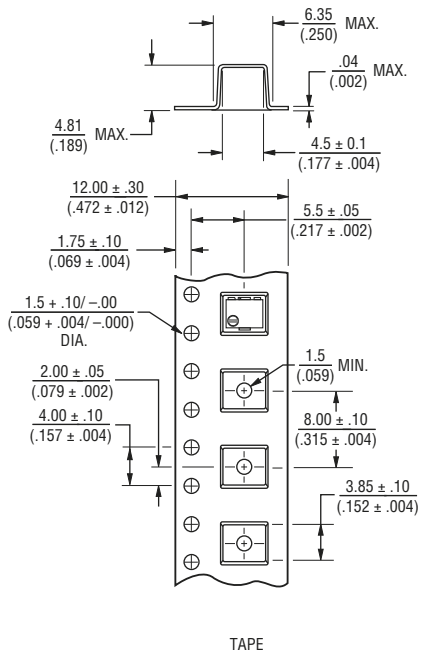
### J Style



### G Style



### W Style



REEL

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. 09/17

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Users should verify actual device performance in their specific applications.

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