



## 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 lead free surface mount trimmers

# 3223 - 3 mm SMD 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

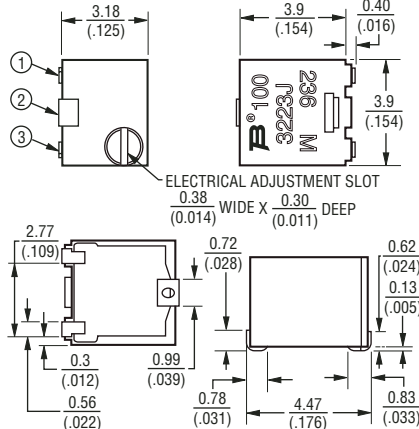
Power Rating (200 volts max.)  
 70 °C.....0.125 watt  
 150 °C.....0 watt  
 Temperature Range.....-65 °C to +150 °C  
 Temperature Coefficient.....±100 ppm/°C  
 Humidity.....MIL-STD-202 Method 106  
 TRS ±3 %; IR 10 megohms  
 Vibration.....20 G TRS ±1 %; VRS ±1 %  
 Shock.....100 G TRS ±1 %; VRS ±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 %

## Physical Characteristics

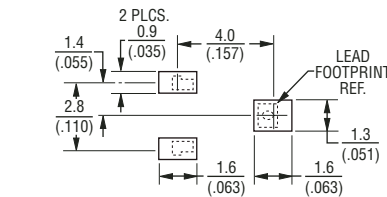
Mechanical Stop.....Wiper idles  
 Torque.....2.50 oz-in. max  
 Weight.....Approximately 0.01 oz.  
 Marking.....Manufacturer's code,  
 resistance code and date code  
 Solderability.....Per MIL-STD-202,  
 Method 208  
 Wiper.....50 % (Actual TR) ±10 %  
 Flammability.....UL94V-0  
 Adjustment Tool.....H-92-1

## Product Dimensions

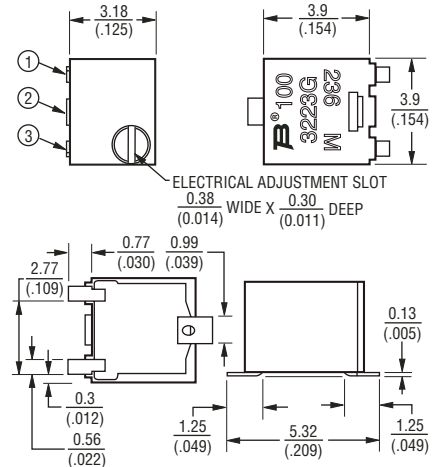
### 3223J Side Adjust



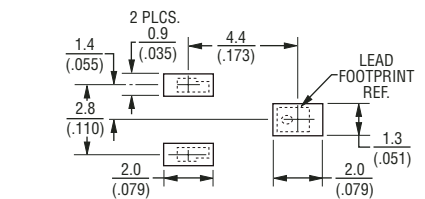
### RECOMMENDED LAND PATTERN



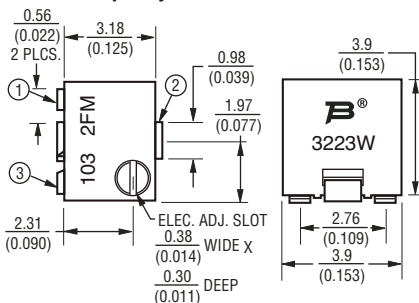
### 3223G Side Adjust



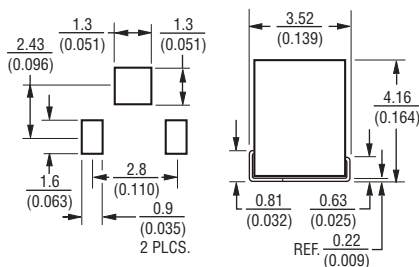
### RECOMMENDED LAND PATTERN



### 3223W Top Adjust

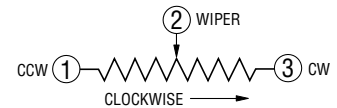


### RECOMMENDED LAND PATTERN



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

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)

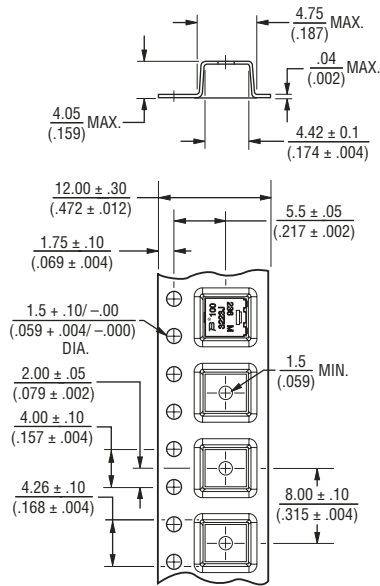
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

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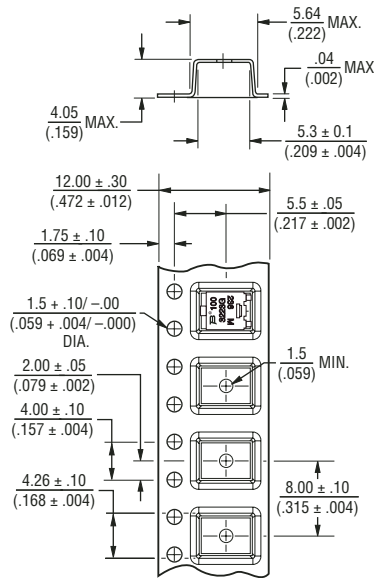
**BOURNS®**

## Packaging Specifications

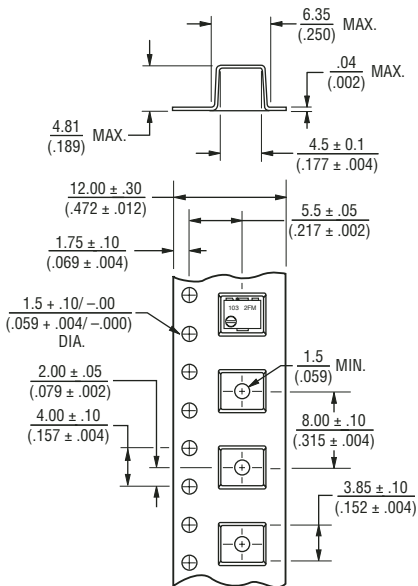
### J Style



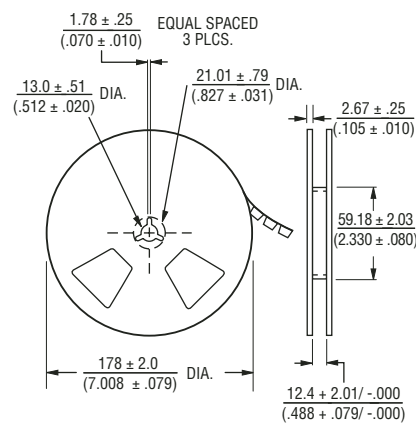
### G Style



### W Style



TAPE



REEL

Cover tape peel strength: Meets EIA specification 481.

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

## 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.