

## Features

- Surface Mount 4 mm Square / Multiturn Cermet / Industrial / Sealed
- Halogen free\*\* with date code 114
- Sealed to withstand board wash processing
- Pick and place centering design, with flush adjustment
- 4mm design meets EIA/EIAJ/IPC/VECI SMD standard trimmer footprint
- Low CRV - 1 %
- RoHS compliant\* - see [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

# 3224 – 4 mm SMD Trimpot® Trimming Potentiometer

## Additional Information

Click these links for more information:



## Electrical Characteristics

Standard Resistance Range... 10 to 2 megohm (see standard resistance table)  
 Resistance Tolerance..... ±10 % std.  
 Absolute Min. Resistance..... 1 % or 2.0 ohms (whichever is greater)  
 Contact Resistance Variation..... 1 % or 3 ohms max.  
 Resolution.....Essentially Infinite  
 Insulation Resistance .....500 VDC 100 megohms min.  
 Dielectric Strength  
 Sea Level.....600 VAC (1 minute)  
 Adjustment Angle..... 12 turns nom.

## Environmental Characteristics

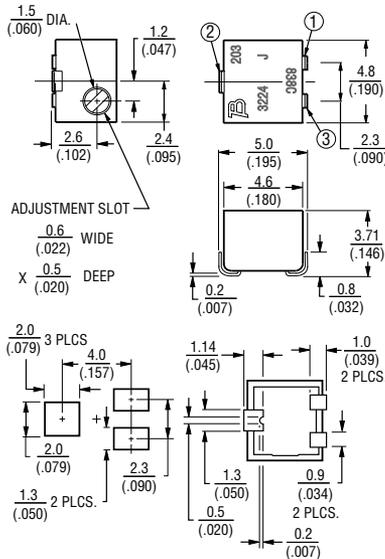
Power Rating (300 volts max.)  
 85 °C.....0.25 watt  
 150 °C.....0 watt  
 Temperature Range..... -65 °C to +150 °C  
 Temperature Coefficient ..... ±100 ppm/°C  
 Seal Test..... 85 °C / 60 seconds  
 Humidity..... MIL-STD 202 Method 106 TRS ±2 %; IR 10 megohms  
 Vibration .....20 G TRS±1 %; VRS ±1 %  
 Shock.....100 G TRS ±1 %; VRS±1 %  
 Load Life..... @ 85 °C rated power 1,000 hours  
 TRS .....3 ohms or 3 % (whichever is greater)  
 Rotational Cycling..... 200 cycles TRS .....3 ohms or 3 % (whichever is greater)  
 Thermal Shock ..... 5 cycles TRS±2 %; VRS±1 %  
 Moisture Sensitivity Level.....N/A  
 ESD Classification ..... 2

## Physical Characteristics

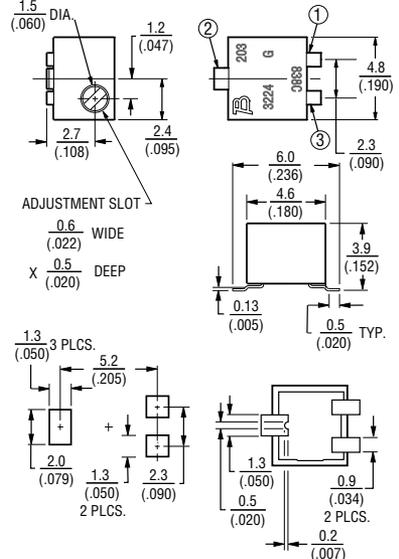
Mechanical Stop.....Wiper idles  
 Torque.....180 g-cm max.  
 Weight .....Approximately 0.01 oz.  
 Marking.....Manufacturer's code, resistance code and date code  
 Solderability ..... Per MIL-STD-202, Method 208  
 Wiper.....50 % (Actual TR) ±10 %  
 Flammability ..... UL94V0  
 Pushover Strength  
 J, G .....4.4 lbs.  
 W, X .....1 lb.  
 Adjustment Tool.....H-91  
 Storage Condition  
 ..... 40 °C max. / 70 % R.H. max.

## Product Dimensions

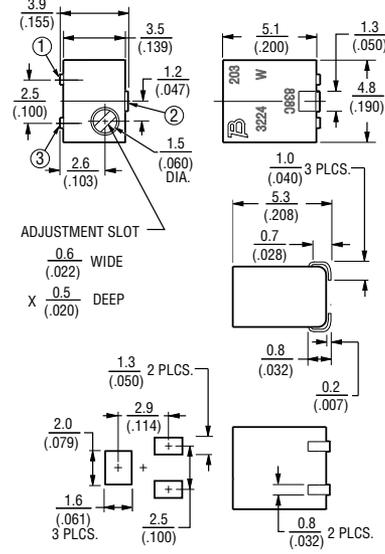
### 3224J Side Adjust



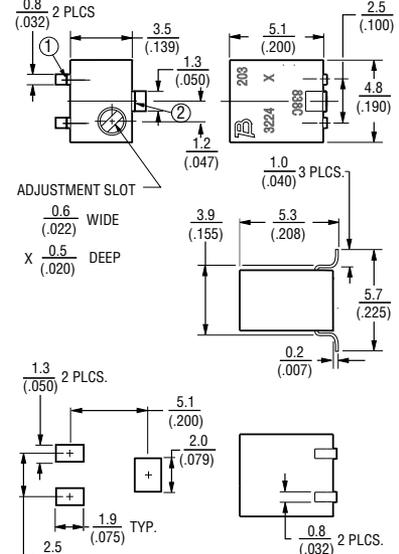
### 3224G Side Adjust



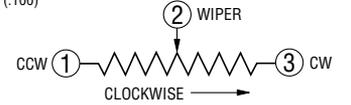
### 3224W Top Adjust



### 3224X Top Adjust



DIMENSIONS: MM (INCHES)  
 TOLERANCES: ± 0.25 (0.010) EXCEPT WHERE NOTED



\* RoHS Directive 2015/863, Mar. 31, 2015 and Annex  
 \*\* Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.  
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**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Additional Features

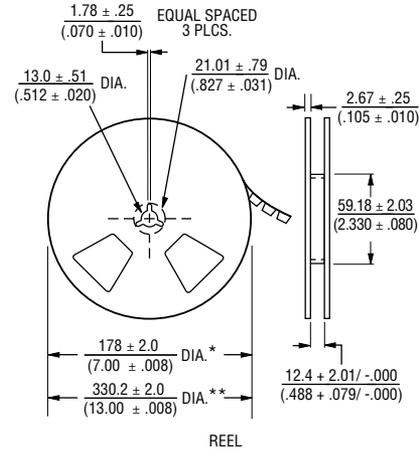
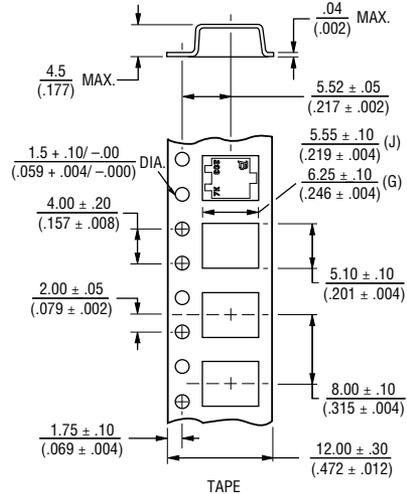
- Top and side adjust styles
- J-hook, and gull-wing

# 3224 – 4 mm SMD Trimpot® Trimming Potentiometer

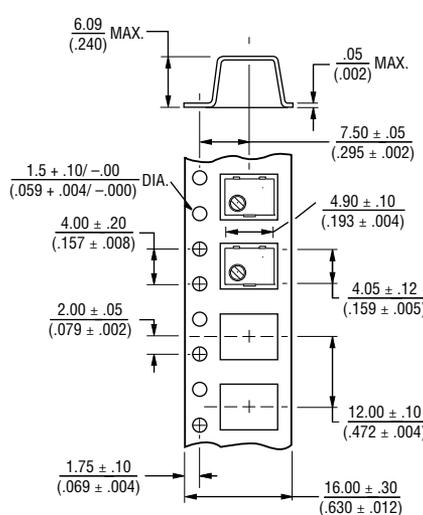
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## Packaging Specifications

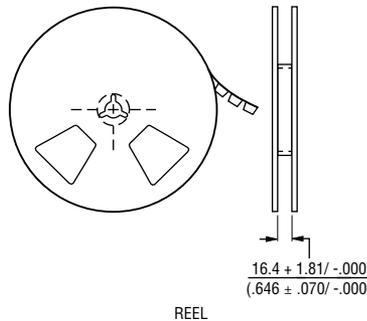
### J & G Styles



### W Style



### W & X Style Reel

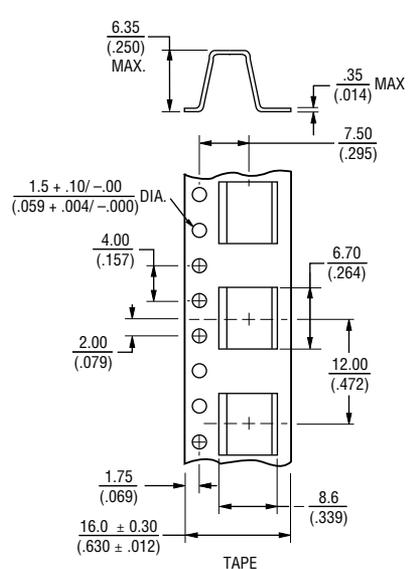


- \* Embossed Tape Designator "E"
- \*\* Embossed Tape Designator "G"
- (See How To Order chart for further information.)

Cover tape peel strength: Meets EIA specification 481.

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

### X Style



## How To Order

**3224 J - 1 - 502 E**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Standard or Modified \_\_\_\_\_  
 Product Indicator \_\_\_\_\_  
 -1= IR Reflow (standard)  
 †-2= Wave Solderable  
 -FW5= .070 ± .010 " Shaft Extension  
 Resistance Code \_\_\_\_\_  
 Embossed Tape Designator \_\_\_\_\_  
 E = Style J, G: 500 pcs./7 " reel (standard)  
 Style W: 250 pcs./7 " reel (standard)  
 Style X: 200 pcs./7 " reel (standard)  
 G = Style J, G: 1500 pcs./13 " reel (standard)  
 Style W: 1000 pcs./13 " reel (standard)  
 Style X: 850 pcs./13 " reel (standard)  
 Blank = Style J, G: 1500 pcs./13 " reel (FW5)  
 Style W, X: 600 pcs./13 " reel (FW5)

Consult factory for other available options.

† -2 has a treated stainless steel shaft.

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

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## 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>

Resistance (Ohms)	Resistance Code
<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 distribution values listed in **boldface**.  
 Special resistances available.

REV. 07/24

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