

## 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

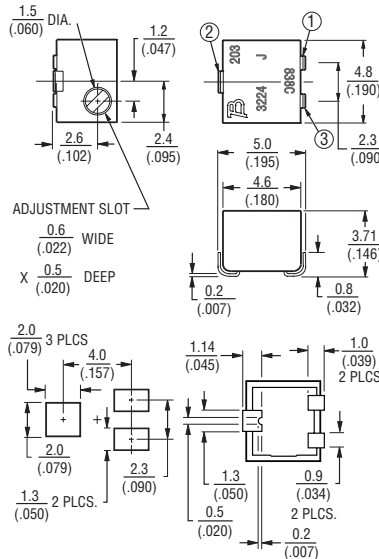
Power Rating (300 volts max.)  
85 °C.....0.25 watt  
150 °C.....0 watt  
Temperature Range.....-65 °C to +150 °C  
Temperature Coefficient .....±100 ppm/°C  
Seal Test..... 85 °C Fluorinert<sup>†</sup>/60 seconds  
Humidity .....MIL-STD 202 Method 106  
TRS ±2 %; IR 10 megohms  
Vibration ..... 20 G 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

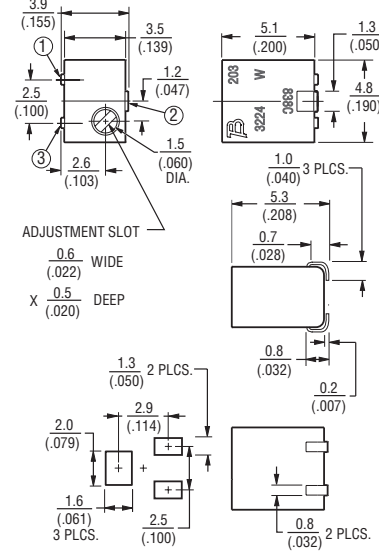
Mechanical Stop ..... Wiper idles  
Torque..... 180 g-cm max.  
Weight ..... Approximately 0.01 oz.  
Marking..... Manufacturer's code,  
resistance code and date code  
Solderability..... Per MIL-STD-202,  
Method 208  
Wiper ..... 50 % (Actual TR) ±10 %  
Flammability ..... UL94V0  
Pushover Strength  
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

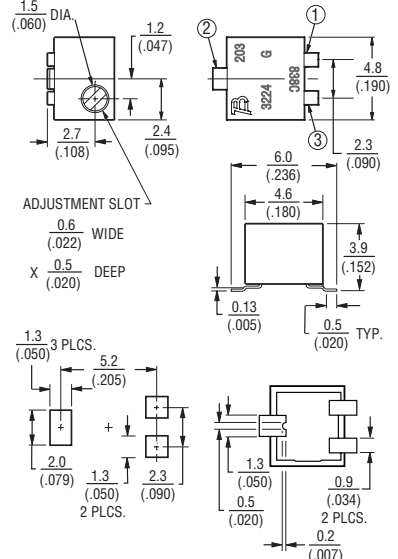


#### 3224W Top Adjust

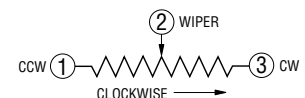
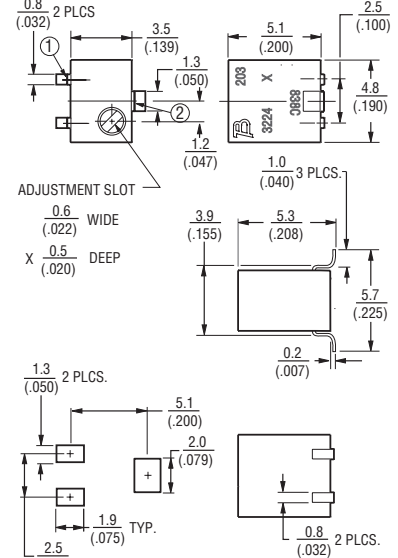


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$   
TOLERANCES:  $\pm \frac{0.25}{(.010)}$  EXCEPT WHERE NOTED

#### 3224G Side Adjust



#### 3224X Top Adjust



\* 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

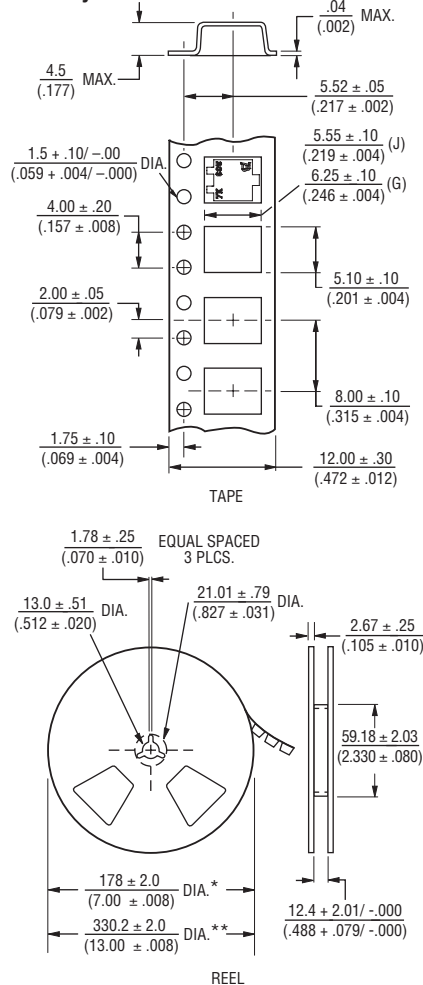
- Top and side adjust styles
- J-hook, and gull-wing

# 3224 - 4 mm SMD Trimpot® Trimming Potentiometer

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## Packaging Specifications

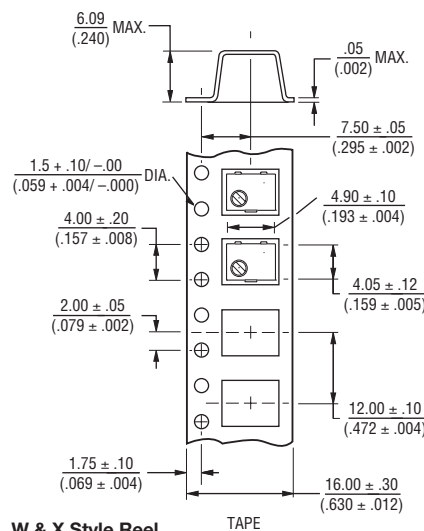
### J & G Styles



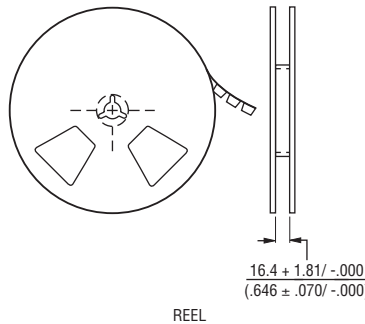
\* Embossed Tape Designator "E"  
 \*\* Embossed Tape Designator "G"  
 (See How To Order chart for further information.)

Cover tape peel strength: Meets EIA specification 481.

### W Style



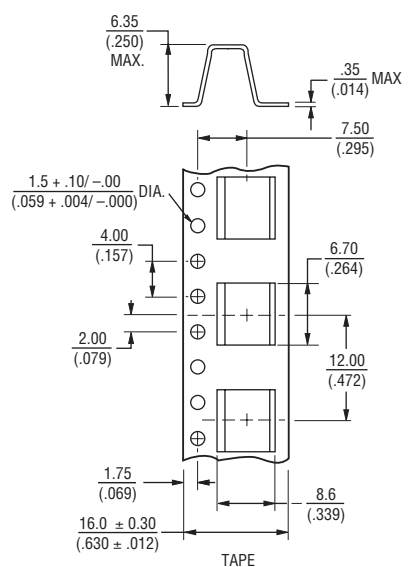
### W & X Style Reel



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

Cover tape peel strength: Meets EIA specification 481.

### 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.

## 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.

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