

## Features

- Surface Mount 4 mm Square / Multiturn Cermet / Industrial / Sealed
- 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 lead free surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

# 3224 - 4 mm SMD Trimpot® Trimming Potentiometer

## Electrical Characteristics

Standard Resistance Range ..... 10 to 2 megohm  
(see standard resistance table)

Resistance Tolerance ..... ±10 % std.

Absolute Minimum 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

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 %

## 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

## How To Order

Model **3224 J - 1 - 502 E**

Style \_\_\_\_\_

Standard or Modified Product Indicator

-1= IR Reflow (standard)  
†-2= Wave Solderable  
-FW5= .070 ± .010" Shaft Extension  
-GJ4= MSL 2a Packaging (for -1 only)

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)

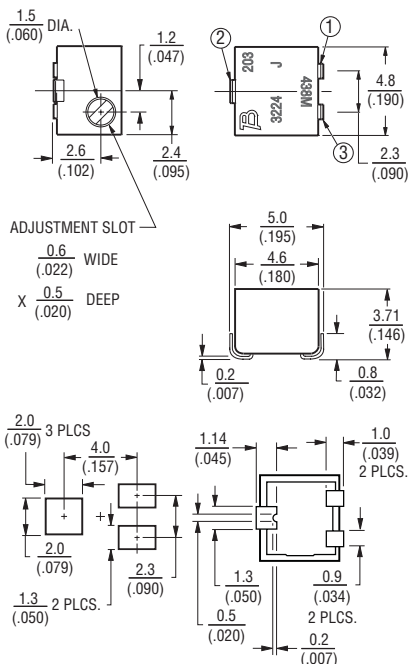
G = Style J, G: 1500 pcs./13" reel (standard)  
Style W: 1000 pcs./13" reel (standard)  
Style X: 850 pcs./13" reel (standard)

Blank = Style J, G: 1500 pcs./13" reel (FW5)  
Style W, X: 600 pcs./13" reel (FW5)

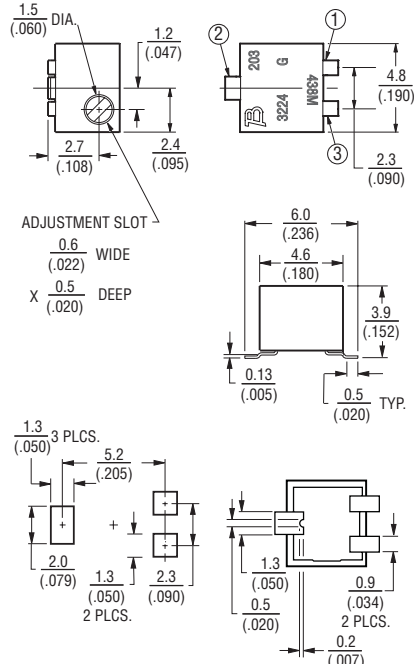
Consult factory for other available options.  
† -2 has a treated stainless steel shaft

## Product Dimensions

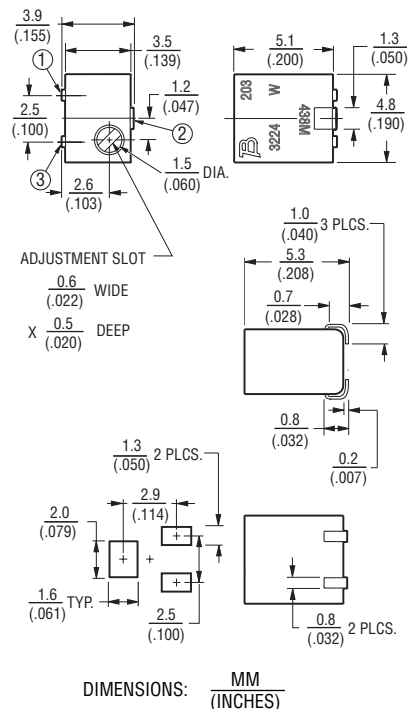
### 3224J Side Adjust



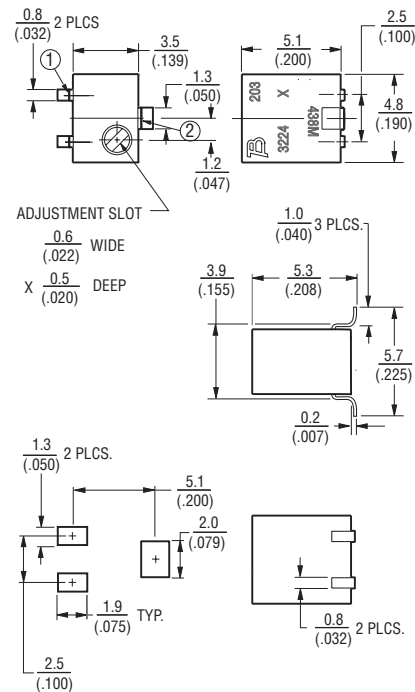
### 3224G Side Adjust



### 3224W Top Adjust



### 3224X Top Adjust



\*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.

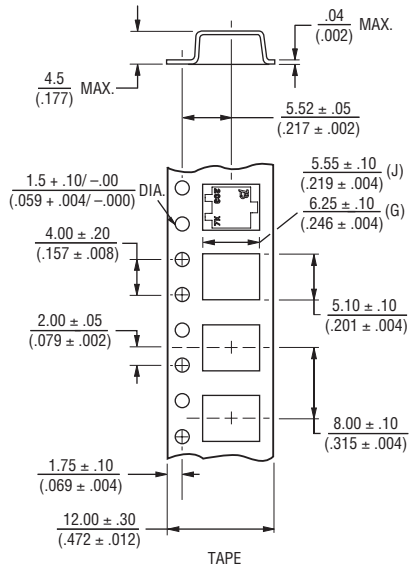
## Additional Features

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

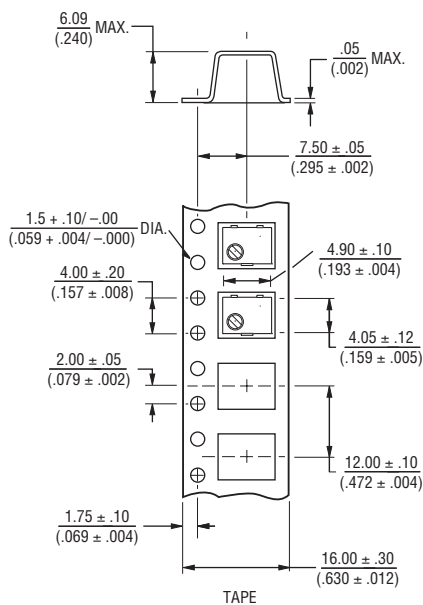
# 3224 - Packaging Specifications

**BOURNS®**

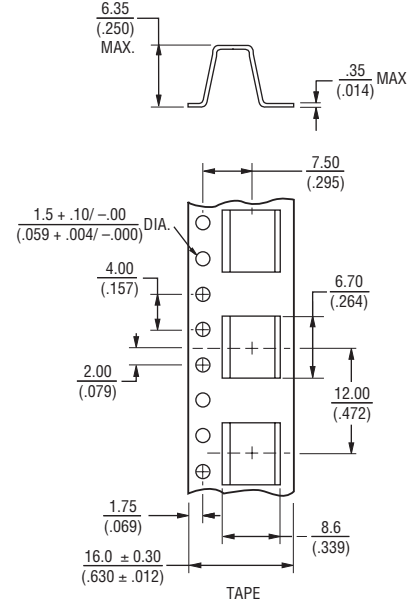
### J & G Styles



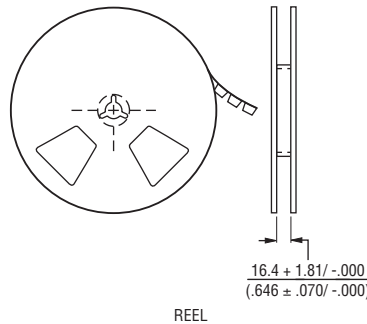
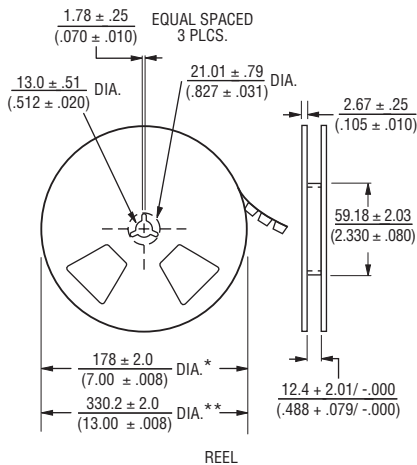
### W Style



### X Style



### W & X Style Reel

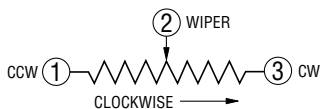


\* Embossed Tape Designator "E"  
 \*\* Embossed Tape Designator "G"  
 (See How To Order chart for further information.)

Cover tape peel strength: Meets EIA specification 481.

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

### 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 distribution values listed in boldface.  
 Special resistances available.

REV. 08/31/10

"Trimpot" is a registered trademark of Bourns, Inc.  
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