



## Features

- Surface Mount 4mm 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/VRCI SMD standard trimmer footprint
- Low CRV - 1%
- DESC selected material drawing #92021

# 3224 - 4mm SMD 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 (1minute)  
 Adjustment Angle ..... 11 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 ..... ±100ppm/°C  
 Humidity ..... MIL-STD 202 Method 106  
 TRS ±2%; IR 10 megohms  
 Vibration ..... 20G TRS ±1%; VRS ±1%  
 Shock ..... 100G 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

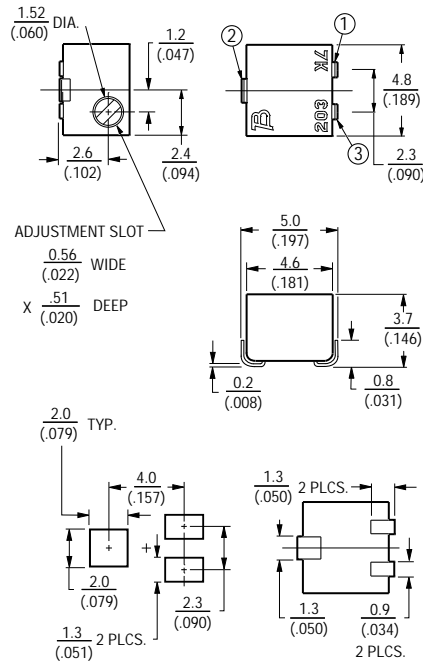
Mechanical Stop ..... Wiper idles  
 Torque ..... 180g-cm max.  
 Weight ..... Approximately 0.01 oz.  
 Marking ..... Manufacturer's code,  
 resistance code and date code  
 Solderability ..... Per MIL-STD-202,  
 Method 208  
 Wiper ..... Set at 50% nominal  
 Flammability ..... UL94V0  
 Adjustment Tool ..... H-91

## How To Order

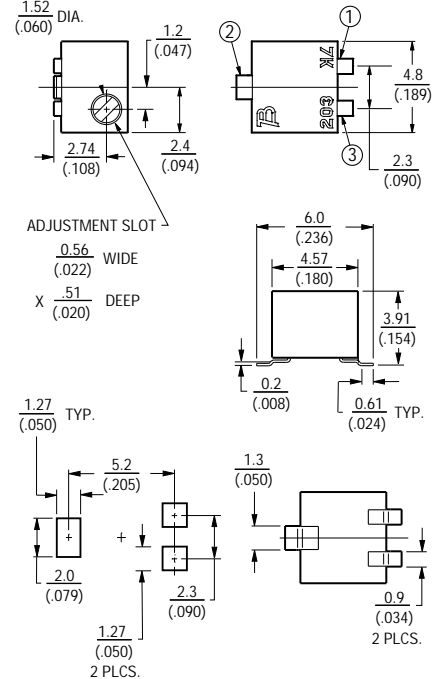
**3224 J - 1 - 502 E**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Standard or Modified Product Indicator  
 -1 = Standard Product - IR Reflow  
 \* -2 = Wave Solderable  
 -FW5 = .070" ± .010" Shaft Extension  
 Resistance Code \_\_\_\_\_  
 Embossed Tape Designator \_\_\_\_\_  
 Style J, G: 500 pcs./7" reel (standard)  
 Style W: 250 pcs./7" reel (standard)  
 Consult factory for other available options.  
 \* -2 has a treated stainless steel shaft

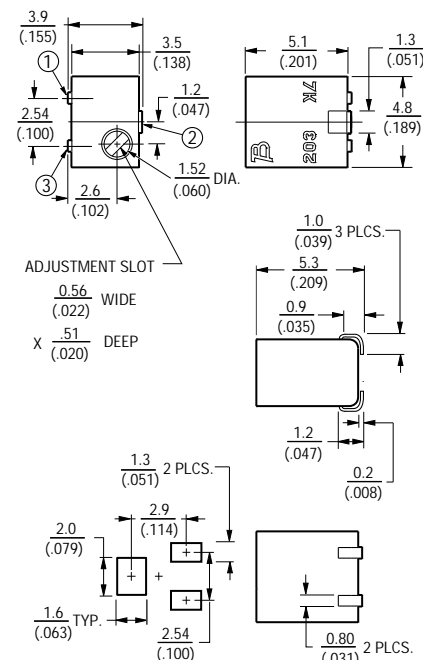
### 3224J Side Adjust



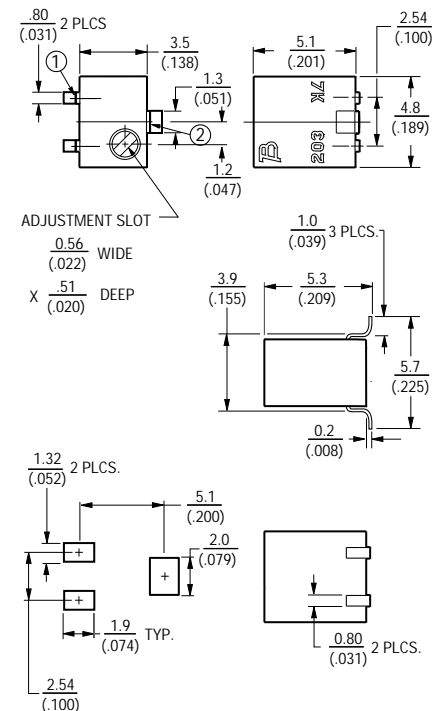
### 3224G Side Adjust



### 3224W Top Adjust



### 3224X Top Adjust



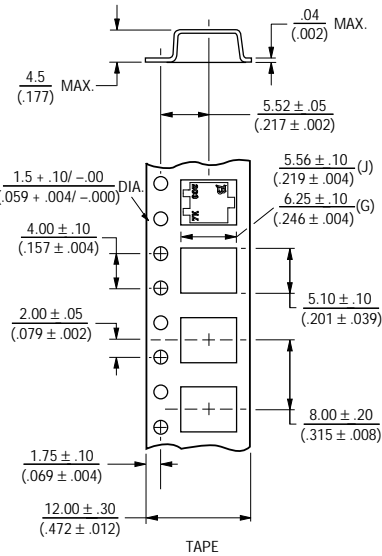
## Additional Features

- Top and side adjust styles
- J-hook, and gull-wing
- Patent #5047746 advanced drive/wiper mechanism

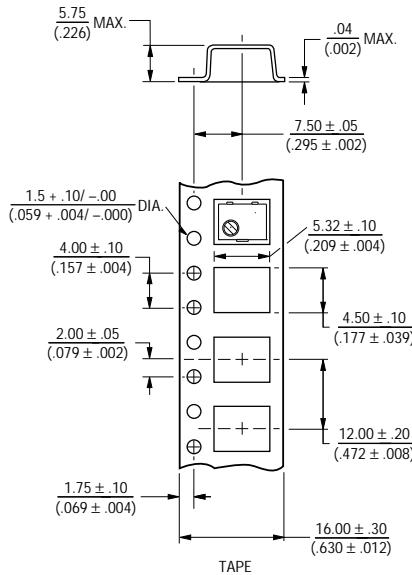
# 3224 - Packaging Specifications

**BOURNS®**

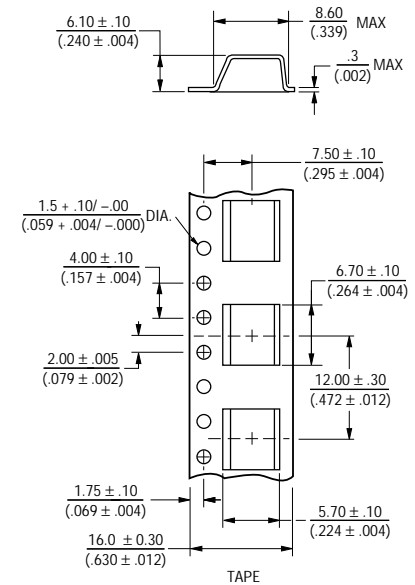
### J & G Styles



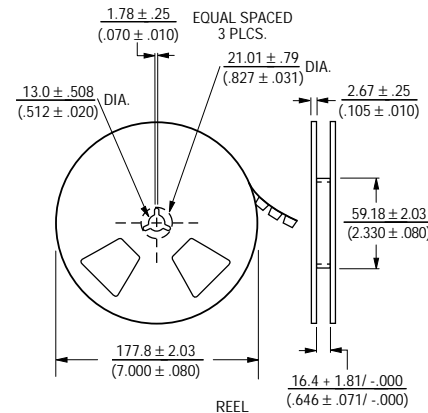
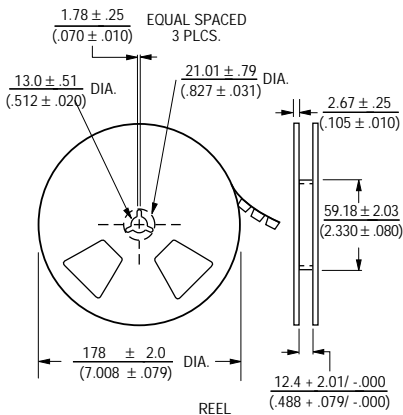
### W Style



### X Style



### W & X Style Reel

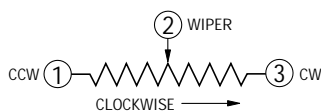


Cover tape peel strength:  
Meets EIA specification 481.

Cover tape peel strength:  
Meets EIA specification 481.

Units packaged 500 pieces per reel.

Units packaged 250 pieces per reel. (w)  
Units packaged 200 pieces per reel. (x)



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

DIMENSIONS ARE: METRIC / (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. Special resistances available.

SHADED AREAS TYPICALLY NOT STOCKED BY DISTRIBUTORS AND NOT RECOMMENDED FOR NEW DESIGNS.