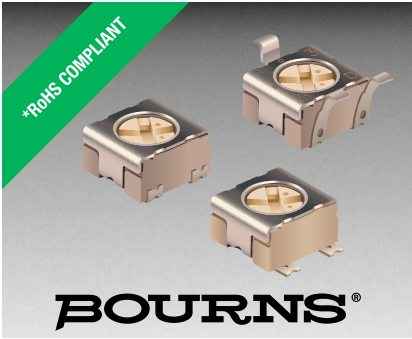




**THE DATASHEET OF  
PVG3G500C01R00**





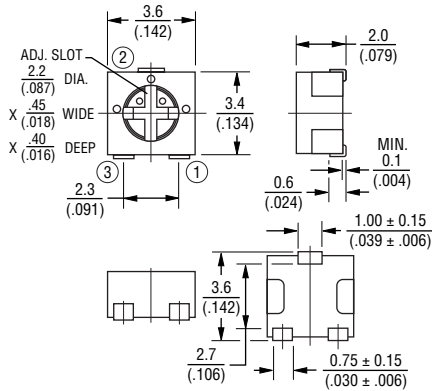
## Features

- Surface Mount 3 mm Square / Single-turn / Cermet / Sealed
- Available in J-hook, gull-wing and reverse gull-wing pin styles
- Units can be pre-adjusted at clockwise, counter-clockwise or standard 50 % position
- 3 mm design meets EIA/EIAJ/IPC/VECI SMD standard trimmer footprint
- RoHS compliant\*
- Metal cover for thermal protection/heat transfer
- Units tested under 85 °C water test for 60 seconds, no bubbles
- Storage Condition.... 40 °C max. / 70 % R.H. max.

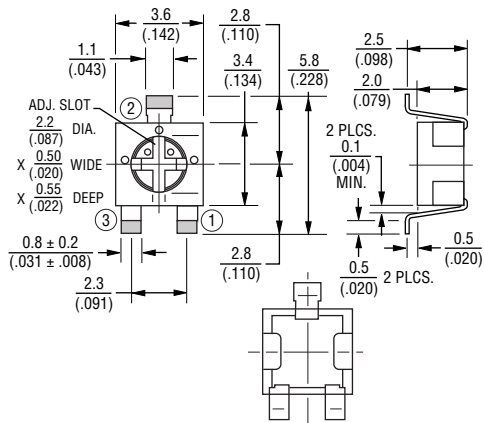
## PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer

### Product Dimensions

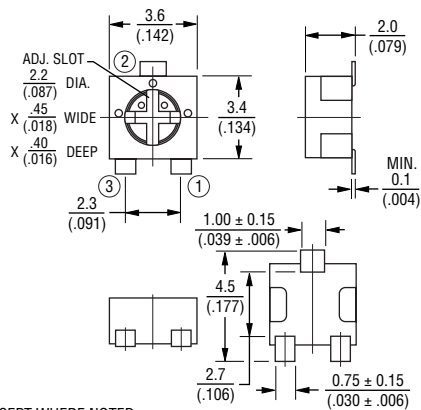
#### PVG3A



#### PVG3K



#### PVG3G



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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### Additional Information

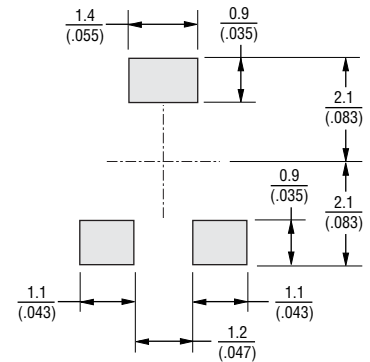
Click these links for more information:



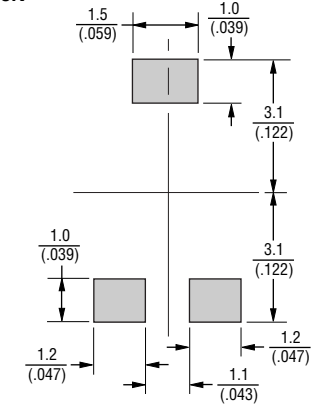
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### Recommended PCB Layout

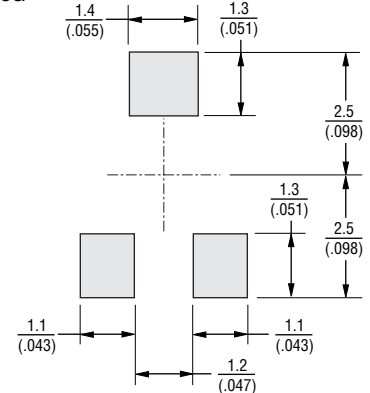
#### PVG3A



#### PVG3K



#### PVG3G



TOLERANCES: ± 0.1 (.004) EXCEPT WHERE NOTED

# PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer

# BOURNS®

## How To Order

Product ID _____	PV	G3	A	103	C01	R00
PV = Trimming Potentiometer						
Series _____						
G3 = SMD Sealed 3 mm Square, Single-Turn						
Adjustment Direction/Lead Type _____						
A = J-Hook						
G = Gull-Wing						
K = Reverse Gull-Wing						
Resistance Code _____						
See Standard Resistance Table						
Individual Specification _____						
C01 = Standard Type						
Packaging _____						
R00 = Tape and Reel (1,000 pcs./7" reel)						

## Environmental Characteristics

Temperature Cycle	$\Delta TR : \pm 2 \%$ $\Delta V.S.S.: \pm 1 \%$
Humidity	$\Delta TR : \pm 2 \%$ IR : 10 M ohm min.
Vibration (20 G)	$\Delta TR : \pm 1 \%$ $\Delta V.S.S.: \pm 1 \%$
Shock (100 G)	$\Delta TR : \pm 1 \%$ $\Delta V.S.S.: \pm 1 \%$
Temperature Load Life	$\Delta TR : \pm 3 \%$ or 3 ohm max., whichever is greater $\Delta V.S.S.: \pm 1 \%$
Low Temperature Exposure	$\Delta TR : \pm 2 \%$ $\Delta V.S.S.: \pm 2 \%$
High Temperature Exposure	$\Delta TR : \pm 3 \%$ $\Delta V.S.S.: \pm 2 \%$
Rotational Life	$\Delta TR : R \leq 100 \text{ kohm}$ $\pm 3 \%$ or 2 ohm max., whichever is greater $R > 100 \text{ kohm}$ +0/-10 % (50 cycles)

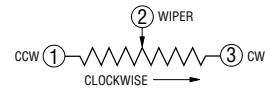
$\Delta TR$ : Total Resistance Change  
 $\Delta V.S.S.$ : Voltage Setting Stability  
 IR: Insulation Resistance

## 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.

## Schematic



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**PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer** **BOURNS®**

**Top Adjustment (Standard J-Hook Style)**

Model Number	Power Rating @ 70 °C (W)	Number of Turns (Effective Rotation Angle)	Mechanical Rotation Angle	Total Resistance Value (Ω)	Resistance Tolerance	TCR (ppm/°C)
PVG3A100C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	10	±20 %	±150
PVG3A200C01				20		
PVG3A500C01				50		
PVG3A101C01				100		
PVG3A201C01				200		
PVG3A501C01				500		
PVG3A102C01				1k		
PVG3A202C01				2k		
PVG3A502C01				5k		
PVG3A103C01				10k		
PVG3A203C01				20k		
PVG3A503C01				50k		
PVG3A104C01				100k		
PVG3A204C01				200k		
PVG3A504C01				500k		
PVG3A105C01				1M		
PVG3A205C01				2M		

Operating Temperature Range: -55 to 125 °C

Soldering Method: Reflow / Soldering Iron

**PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer** **BOURNS®**

**Top Adjustment (Gull-Wing Style)**

Model Number	Power Rating @ 70 °C (W)	Number of Turns (Effective Rotation Angle)	Mechanical Rotation Angle	Total Resistance Value (Ω)	Resistance Tolerance	TCR (ppm/°C)
PVG3G100C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	10	±20 %	±150
PVG3G200C01				20		
PVG3G500C01				50		
PVG3G101C01				100		
PVG3G201C01				200		
PVG3G501C01				500		
PVG3G102C01				1k		
PVG3G202C01				2k		
PVG3G502C01				5k		
PVG3G103C01				10k		
PVG3G203C01				20k		
PVG3G503C01				50k		
PVG3G104C01				100k		
PVG3G204C01				200k		
PVG3G504C01				500k		
PVG3G105C01				1M		
PVG3G205C01				2M		

Operating Temperature Range: -55 to 125 °C

Soldering Method: Reflow / Soldering Iron

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# PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer **BOURNS®**

## Rear Adjustment (Reverse Gull-Wing Style)

Model Number	Power Rating @ 70 °C (W)	Number of Turns (Effective Rotation Angle)	Mechanical Rotation Angle	Total Resistance Value (Ω)	Resistance Tolerance	TCR (ppm/°C)
PVG3K100C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	10	±20 %	±150
PVG3K200C01				20		
PVG3K500C01				50		
PVG3K101C01				100		
PVG3K201C01				200		
PVG3K501C01				500		
PVG3K102C01				1k		
PVG3K202C01				2k		
PVG3K502C01				5k		
PVG3K103C01				10k		
PVG3K203C01				20k		
PVG3K503C01				50k		
PVG3K104C01				100k		
PVG3K204C01				200k		
PVG3K504C01				500k		
PVG3K105C01				1M		
PVG3K205C01				2M		

Operating Temperature Range: -55 to 125 °C

Soldering Method: Reflow / Soldering Iron

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