

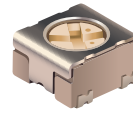
# Trimmer Potentiometers



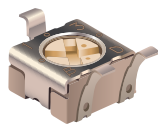
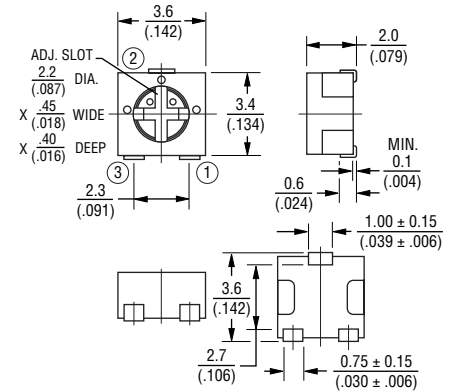
## SMD Sealed Type Single-Turn PVG3 Series

### ■ Features

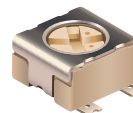
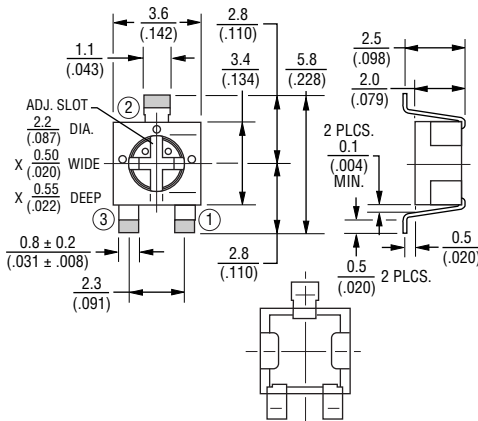
1. Surface Mount 3 mm Square / Single-turn / Cermet / Sealed
2. Available in J-hook, gull-wing and reverse gull-wing pin styles
3. Units can be pre-adjusted at clockwise, counter-clockwise or standard 50 % position
4. 3 mm design meets EIA/EIAJ/IPC/VECI SMD standard trimmer footprint
5. RoHS compliant\*
6. Metal cover for thermal protection/heat transfer
7. Units tested under 85 °C water test for 60 seconds, no bubbles



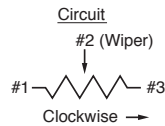
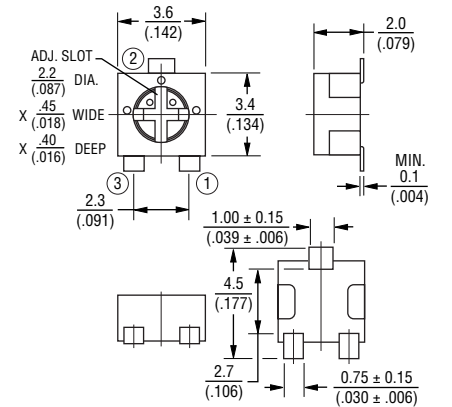
PVG3A



PVG3K



PVG3G



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

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

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

Operating Temperature Range: -55 to +125 °C  
Soldering Method: Reflow / Soldering Iron



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

\*RoHS Directive 2015/863, Mar. 31, 2015 and Annex.  
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## Top Adjustment (Gull-Wing Style)

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

Operating Temperature Range: -55 to +125 °C

Soldering Method: Reflow / Soldering Iron

## Rear Adjustment (Reverse Gull-Wing Style)

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

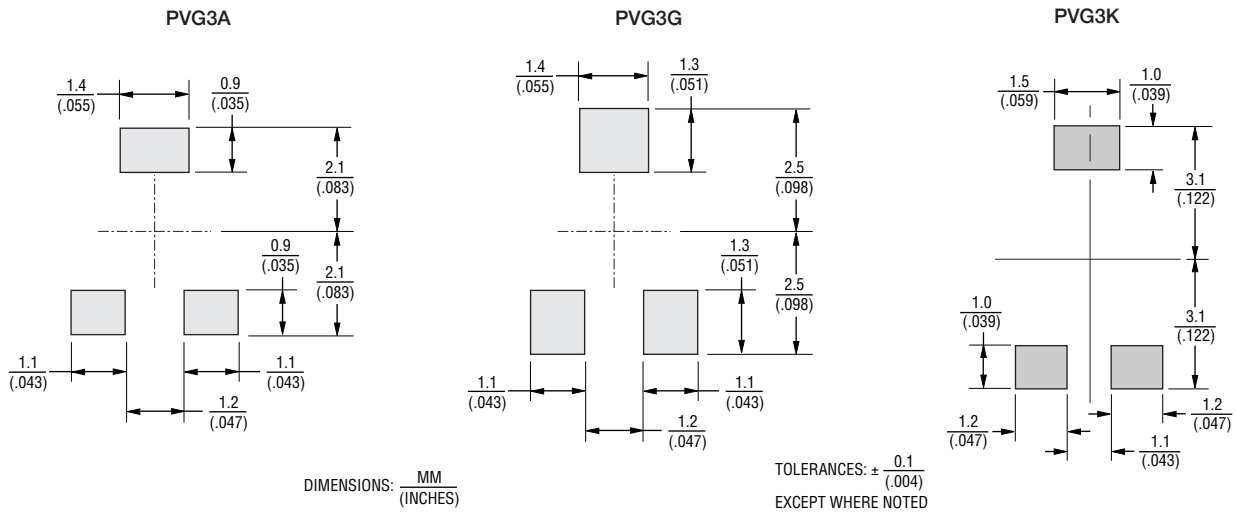
Operating Temperature Range: -55 to +125 °C

Soldering Method: Reflow / Soldering Iron

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## Standard Land Patterns



## Characteristics

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

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

## Part Numbering

**PV G3 A 103 C01 R00**

Product ID \_\_\_\_\_  
PV = Trimming Potentiometer

Series \_\_\_\_\_  
G3 = SMD Sealed 3 mm Square, Single-Turn

Pin Style \_\_\_\_\_  
A = J-Hook  
G = Gull-Wing  
K = Reverse Gull-Wing

Total Resistance \_\_\_\_\_  
Expressed by three figures.  
The first and second figures are significant digits; the third figure expresses the number of zeros that follow.

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.

Individual Specification \_\_\_\_\_  
C01 = Standard Type

Packaging \_\_\_\_\_  
R00 = Tape and Reel (1,000 pcs./7" reel)

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