

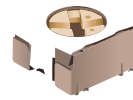
# Trimmer Potentiometers



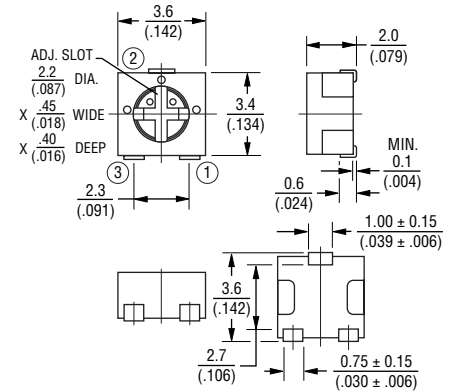
## SMD Sealed Type Single-Turn PVG3 Series

### ■ Features

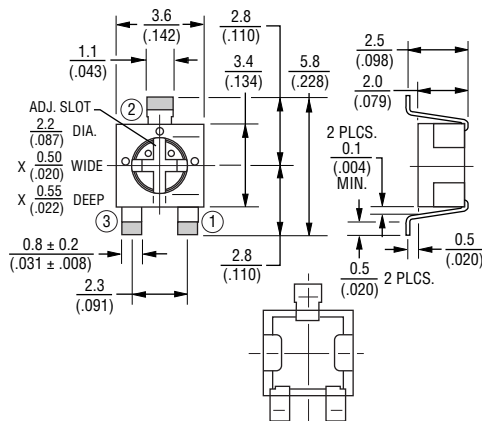
1. Surface Mount 3 mm Square / Single-turn / Cermet / Sealed
2. Available in J-hook, gull-wing and reverse gull-wing pin styles
3. Units can be pre-adjusted at clockwise, counter-clockwise or standard 50 % position
4. 3 mm design meets EIA/EIAJ/IPC/VECI SMD standard trimmer footprint
5. RoHS compliant\*
6. Metal cover for thermal protection/heat transfer
7. For trimmer applications/processing guidelines, [click here](#)



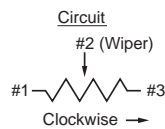
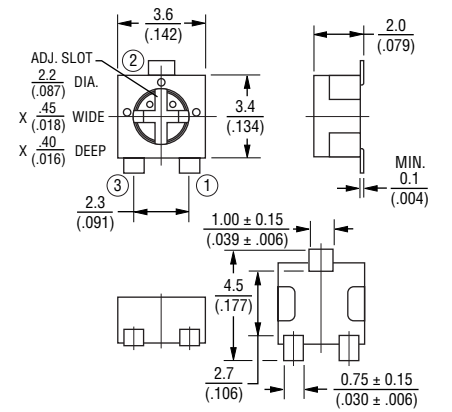
PVG3A



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



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

**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

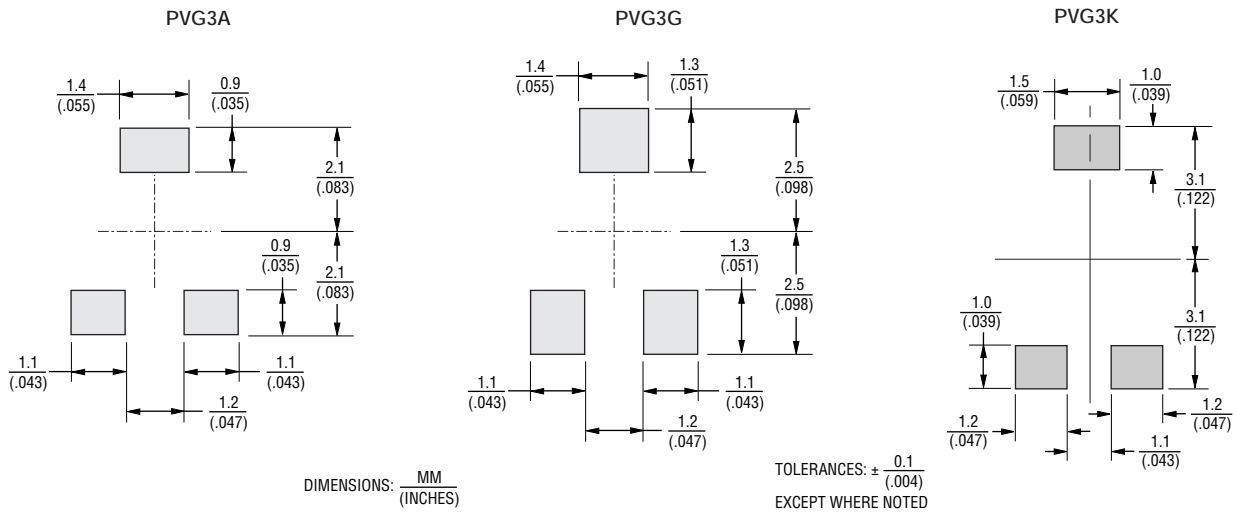
**Rear Adjustment (Reverse Gull-Wing Style)**

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	$\Delta TR$ : $\pm 2\%$ $\Delta V.S.S.$ : $\pm 1\%$
Humidity	$\Delta TR$ : $\pm 2\%$ IR : 10M ohm min.
Vibration (20G)	$\Delta TR$ : $\pm 1\%$ $\Delta V.S.S.$ : $\pm 1\%$
Shock (100G)	$\Delta TR$ : $\pm 1\%$ $\Delta V.S.S.$ : $\pm 1\%$
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

## 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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