

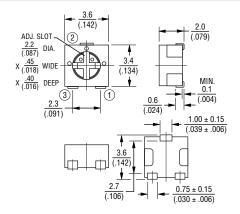
### **Features**

- 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.

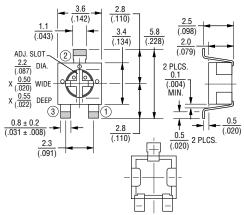
PVG3 Series – SMD Sealed Type Single-Turn Trimming Potentiometer

### **Product Dimensions**

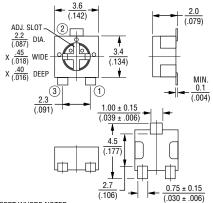
### PVG3A



### PVG3K



### PVG3G



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

DIMENSIONS: (INCHES)

### WARNING Cancer and Reproductive Harm - 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:







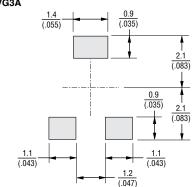




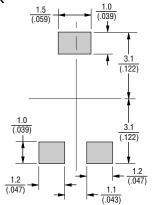
**SAMPLES** 

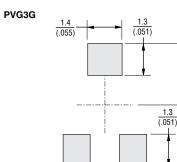
### **Recommended PCB Layout**

### PVG3A









(.043)

EXCEPT WHERE NOTED

(.098)

1.1

(.043)

(.047)

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

# Product ID 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

### **Environmental Characteristics**

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

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

ΔTR: Total Resistance Change ΔV.S.S.: Voltage Setting Stability IR: Insulation Resistance

### **Standard Resistance Table**

Resistance (Ohms)	Resistance Code		
10	100		
20	200		
50	500		
100	101		
200	201		
500	501		
1,000	102		
2,000	202		
5,000	502		
10,000	103		
20,000	203		
50,000	503		
100,000	104		
200,000	204		
500,000	504		
1,000,000	105		
2,000,000	205		

Popular distribution values listed in **boldface**. Special resistances available.

### **Schematic**



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

## **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				10		
PVG3A200C01				20		
PVG3A500C01				50		
PVG3A101C01				100		
PVG3A201C01				200		
PVG3A501C01				500		
PVG3A102C01				1k		
PVG3A202C01				2k		
PVG3A502C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	5k	±20 %	±150
PVG3A103C01				10k		
PVG3A203C01				20k		
PVG3A503C01				50k		
PVG3A104C01				100k		
PVG3A204C01				200k		
PVG3A504C01				500k		
PVG3A105C01				1M		
PVG3A205C01				2M		

Operating Temperature Range: -55 to 125  $^{\circ}\text{C}$ 

Soldering Method: Reflow / Soldering Iron

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

## **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				10		
PVG3G200C01				20		
PVG3G500C01				50		
PVG3G101C01				100		
PVG3G201C01				200		
PVG3G501C01				500		
PVG3G102C01				1k		
PVG3G202C01				2k		
PVG3G502C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	5k	±20 %	±150
PVG3G103C01				10k		
PVG3G203C01				20k		
PVG3G503C01				50k		
PVG3G104C01				100k		
PVG3G204C01				200k		
PVG3G504C01				500k		
PVG3G105C01				1M		
PVG3G205C01				2M		

Operating Temperature Range: -55 to 125  $^{\circ}\text{C}$ 

Soldering Method: Reflow / Soldering Iron

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

## 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				10		
PVG3K200C01				20		
PVG3K500C01				50		
PVG3K101C01				100		
PVG3K201C01				200		
PVG3K501C01				500		
PVG3K102C01				1k		
PVG3K202C01				2k		
PVG3K502C01	0.25	1 (210 ° ±10 °)	250 ° ±10 °	5k	±20 %	±150
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

# **BOURNS**®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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PVG3A104C01R00	PVG3A205C01R00	PVG3G201C01R0	PVG3G501C01R0	PVG3A501C01R00
PVG3A103C01R00	PVG3A101C01R00	PVG3A200C01R00	PVG3A500C01R00	PVG3A100C01R00
PVG3A105C01R00	PVG3A201C01R00	PVG3A202C01R00	PVG3A203C01R00	PVG3A204C01R00
PVG3A502C01R00	PVG3A503C01R00	PVG3A504C01R00	PVG3G100C01R00	PVG3G102C01R00
PVG3G105C01R00	PVG3G200C01R00	PVG3G202C01R00	PVG3G203C01R00	PVG3G204C01R00
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PVG3K502C01R00	PVG3K104C01R00	PVG3K103C01R00		