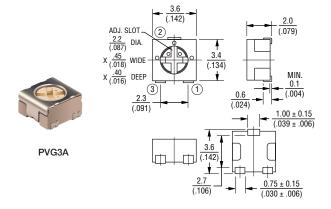
# **Trimmer Potentiometers**

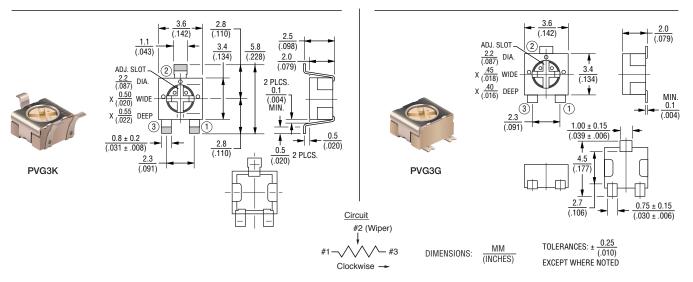
# BOURNS

## 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





#### 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





## **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  $^{\circ}\text{C}$  Soldering Method: Reflow / Soldering Iron

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

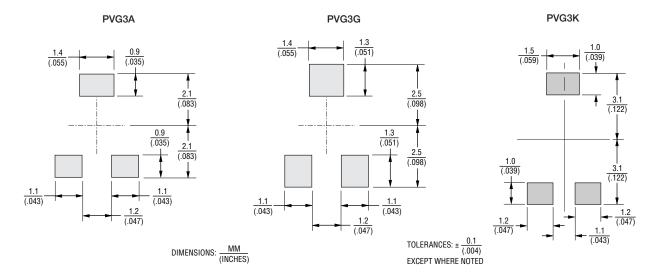
Part Number Power Rating (W)		Number of Turns (Effective Rotation Angle)	Mechanical Rotation Angle	Total Resistance Value	TCR (ppm/°C)	
PVG3K100C01	0.25 (70 °C)	1 (210 ° ±10 °)	250 ± 10 °	10 ohm ± 20%	±150	
PVG3K200C01	0.25 (70 °C)	1 (210 ° ±10 °)	250 ± 10 °	20 ohm ± 20%	±150	
PVG3K500C01	0.25 (70 °C)	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



C01 R00

### ■ Standard Land Patterns



#### ■ Characteristics

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

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

### ■ Part Numbering

Product ID ———————————————————————————————————	PV (	G3 A	103
Series ————————————————————————————————————	Single-1	_ Γurn	
Pin Style ————————————————————————————————————			
Total Resistance Expressed by three figures. The first and second figures are significant digits; the third figure exthe number of zeros that follow.	cpresse	es	

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.

Individual Specification -

C01 = Standard Type



## **Legal Disclaimer Notice**



This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, "Bourns").

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain types of applications are based on Bourns' knowledge of typical requirements in generic applications. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user's application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Users should always verify the actual performance of the Bourns® product in their specific devices and applications, and make their own independent judgments regarding the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., ISO/TS 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification. Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in nuclear, lifesaving, life-critical or life-sustaining applications, nor in any other applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage. Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any Bourns® products in such unauthorized applications might not be safe and thus is at the user's sole risk. Life-critical applications include devices identified by the U.S. Food and Drug Administration as Class III devices and generally equivalent classifications outside of the United States.

Bourns expressly identifies those Bourns® standard products that are suitable for use in automotive applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard products in an automotive application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk. If Bourns expressly identifies a sub-category of automotive application in the data sheet for its standard products (such as infotainment or lighting), such identification means that Bourns has reviewed its standard product and has determined that if such Bourns® standard product is considered for potential use in automotive applications, it should only be used in such sub-category of automotive applications. Any reference to Bourns® standard product in the data sheet as compliant with the AEC-Q standard or "automotive grade" does not by itself mean that Bourns has approved such product for use in an automotive application.

Bourns® standard products are not tested to comply with United States Federal Aviation Administration standards generally or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aircraft or space applications. Bourns expressly identifies Bourns® standard products that are suitable for use in aircraft or space applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard product in an aircraft or space application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

Users shall not sell, transfer, export or re-export any Bourns® products or technology for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor shall they use Bourns® products or technology in any facility which engages in activities relating to such devices. The foregoing restrictions apply to all uses and applications that violate national or international prohibitions, including embargos or international regulations. Further, Bourns® products and Bourns technology and technical data may not under any circumstance be exported or re-exported to countries subject to international sanctions or embargoes. Bourns® products may not, without prior authorization from Bourns and/or the U.S. Government, be resold, transferred, or re-exported to any party not eligible to receive U.S. commodities, software, and technical data.

To the maximum extent permitted by applicable law, Bourns disclaims (i) any and all liability for special, punitive, consequential, incidental or indirect damages or lost revenues or lost profits, and (ii) any and all implied warranties, including implied warranties of fitness for particular purpose, non-infringement and merchantability.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

Web Page: http://www.bourns.com/legal/disclaimers-terms-and-policies

PDF: http://www.bourns.com/docs/Legal/disclaimer.pdf

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Bourns:

PVG3A104C01R00	PVG3A205C01R00	PVG3G201C01R00	PVG3G501C01R0	0 PVG3A501C01R00
PVG3A103C01R00	PVG3A101C01R00	PVG3A200C01R00	PVG3A500C01R00	PVG3A100C01R00
PVG3A105C01R00	PVG3A201C01R00	PVG3A202C01R00	PVG3A203C01R00	PVG3A204C01R00
PVG3A502C01R00	PVG3A503C01R00	PVG3A504C01R00	PVG3G100C01R00	PVG3G102C01R00
PVG3G105C01R00	PVG3G200C01R00	PVG3G202C01R00	PVG3G203C01R00	PVG3G204C01R00
PVG3G205C01R00	PVG3G500C01R00	PVG3G502C01R00	PVG3G503C01R00	PVG3G504C01R00
PVG3A102C01R00	PVG3G104C01R00	PVG3G101C01R00	PVG3G103C01R00	PVG3G224C01R00
PVG3K102C01R00	PVG3A224C01R00	PVG3K100C01R00	PVG3K101C01R00	PVG3K105C01R00
PVG3K200C01R00	PVG3K503C01R00	PVG3K504C01R00	PVG3K201C01R00	PVG3K202C01R00
PVG3K203C01R00	PVG3K204C01R00	PVG3K500C01R00	PVG3K501C01R00	PVG3K205C01R00
PVG3K502C01R00	PVG3K104C01R00	PVG3K103C01R00		