

### Features

- 1-1/4 "Rectangular / Multiturn Wirewound / Industrial / Sealed
- Panel mount option available
- Listed on the QPL for style RT12 per MIL-PRF-27208
- RoHS compliant\*
- For trimmer applications/processing guidelines, click here

#### **Additional Information**

Click these links for more information:



# 3057 - Trimpot<sup>®</sup> Trimming Potentiometer

#### Electrical Characteristics

Std. Resistance Range 10 to 50K ohms (see standard resistance table)
Resistance Tolerance±5 % std.
(tighter tolerance available)
Absolute Minimum Resistance
0.1 % or 1 ohm max.
(whichever is greater)
Noise
Resolution See Resistance Table
Insulation Resistance
1,000 megohms min.
Dielectric Strength
Sea Level1,500 VAC
70,000 Feet400 VAC
Adjustment Travel
Environmental Characteristics
Power Rating @ 70 °C 1 watt
Power Rating @ 150 °C 0 watt
Temperature Range55 °C to +150 °C
Temperature Coefficient±50 ppm/°C
Seal Test85 °C (pin styles only)
Humidity MIL-STD-202 Method 106
96 hours
2 % ∆TR, 100 Megohms IR)
Vibration
+ resolution $\Delta VR$ )
Shock100 G (1 % ΔTR; 0.5 %
+ resolution ΔVR)
Load Life1,000 hours 1 watt @ 70 °C
(2 % ΔTR)
Rotational Life 200 cycles (2 % ΔTR)
Moisture Sensitivity Level N/A
ESD Classification (HBM)2
Physical Characteristics
Torque
Mechanical Stops Wiper idles

Torque 8.0 oz-in. max.
Mechanical Stops Wiper idles
TerminalsSolderable pins and lugs
Flexible leads (7 strands of 30 AWG)
Weight 0.10 oz.
MarkingManufacturer's trademark,
resistance code, terminal numbers,
date code, manufacturer's model
number and style
Wiper 50 % (Actual TR) ±10 %
FlammabilityU.L. 94V-0
Standard Packaging
P&Y Style 10 pcs. per tube
L&J Style 100 pcs. per box
Adjustment ToolH-90

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

"Trimpot" is a registered trademark of Bourns, Inc.

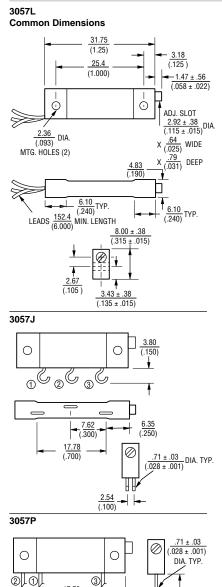
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

REV. 06/24

#### **Product Dimensions**

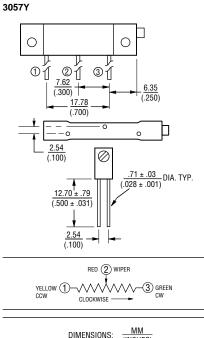


17.78

(.700) 22.86

<u>12.70 ± .79</u> (.500 ± .031)

6.60



(INCHES)

<u>0.25</u> (.010) TOLERANCES: ± EXCEPT WHERE NOTED

### **Standard Resistance Table**

Resistance (Ohms)	Resistance Code	Nominal Resolution (Percent)
10	100	2.40
20	200	1.90
50	500	1.40
100	101	1.00
200	201	0.86
500	501	0.89
1,000	102	0.72
2,000	202	0.58
5,000	502	0.43
10,000	103	0.34
20,000	203	0.31
50.000	503	0.24

Popular values listed in boldface. Special resistances available.

	3057	L - 1	1 - 10	3 M
Model				
Style				
Standard or Modified Product Indicator —— -1 = Standard Product	t			
Resistance Code ——				
Optional Suffix Letter – M = Panel Mount (Factory Installed	d)			

# **Legal Disclaimer Notice**

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

Unless otherwise expressly indicated in writing, Bourns<sup>®</sup> 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<sup>®</sup> products.

The characteristics and parameters of a Bourns<sup>®</sup> 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<sup>®</sup> product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns<sup>®</sup> 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<sup>®</sup> product with other components of a Bourns<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> product as meeting the requirements of a particular industry standard (e.g., IATF 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns<sup>®</sup> product to meet the requirements of such industry standard or particular qualification. Users of Bourns<sup>®</sup> products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns<sup>®</sup> 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<sup>®</sup> standard products shall also apply to such Bourns<sup>®</sup> custom products.

Users shall not sell, transfer, export or re-export any Bourns<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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: <u>http://www.bourns.com/legal/disclaimers-terms-and-policies</u> PDF: <u>http://www.bourns.com/docs/Legal/disclaimer.pdf</u>

# **Mouser Electronics**

Authorized Distributor

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

## Bourns:

3057Y-1-202 3057Y-1-203 3057Y-1-200 3057Y-1-201 3057Y-1-253 3057Y-1-251 3057Y-1-252 3057L-1-503 3057J-1-503 3057J-1-500 3057J-1-501 3057L-1-501 3057J-1-502 3057L-1-502 3057L-1-502 3057P-1-103 3057P-1-100 3057P-1-102 3057P-1-101 3057Y-1-500 3057Y-1-503 3057Y-1-501 3057Y-1-502 3057L-1-502M 3057Y-1-503M 3057Y-1-502M 3057J-1-502M 3057P-1-500M 3057J-1-500M 3057L-1-503M 3057L-1-500M 3057Y-1-403 3057P-1-201 3057P-1-200 3057P-1-202 3057P-1-203 3057L-1-253 3057J-1-251 3057J-1-203 3057J-1-201 3057L-1-203 3057J-1-252 3057L-1-201 3057L-1-200 3057L-1-202 3057J-1-202 3057J-1-200 3057Y-1-102 3057Y-1-100 3057Y-1-103 3057Y-1-101 3057P-1-102M 3057Y-1-102M 3057J-1-102M 3057P-1-100M 3057L-1-100M 3057L-1-102M 3057Y-1-101 3057P-1-101M 3057J-1-100M 3057J-1-101M 3057L-1-101M 3057J-1-103M 3057Y-1-103 3057Y-1-103M 3057P-1-101M 3057J-1-101M 3057J-1-201M 3057L-1-201M 3057Y-1-203M 3057Y-1-203M 3057L-1-201M 3057P-1-203M 3057L-1-203M 3057J-1-201M 3057L-1-201M 3057J-1-202M 3057L-1-201M 3057P-1-203M 3057L-1-203M 3057J-1-203M 3057J-1-202M 3057L-1-202M 3057J-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-203M 3057J-1-103 3057J-1-101 3057L-1-202M 3057L-1-202M 3057L-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-203M 3057J-1-103 3057J-1-101 3057L-1-202M 3057L-1-202M 3057L-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-203M 3057J-1-103 3057J-1-101 3057L-1-202M 3057L-1-202M 3057L-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-203M 3057J-1-203M 3057J-1-202M 3057L-1-202M 3057L-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-203M 3057J-1-103 3057J-1-101 3057L-1-202M 3057L-1-202M 3057L-1-202M 3057L-1-200M 3057J-1-202M 3057L-1-503M 3057J-1-503M 3057J-1-501M 3057J-1-501M 3057J-1-102 3057L-1-200M 3057J-1-503 3057P-1-502 3057P-1-503 3057P-1-252