

Single-Turn Precision Potentiometer

Model 5311



Features:

- 1-5/16" diameter
- Wirewound



Electrical

| | |
|---|---|
| Resistance Range, Ohms | 10 to 44.6K |
| Standard Resistance Tolerance | ±3% (±5% ≤40 Ohms) |
| Minimum Practical Resistance Tolerance | ±1% |
| Independent Linearity | ±0.5% (±1% ≤250 Ohms) |
| Minimum Practical Independent Linearity | ±1.0%, ≤40 Ohms ±0.75%, 41-99 Ohms ±0.5%, 100-249 Ohms ±0.25%, ≥250 Ohms |
| Input Voltage | 400Vdc not to exceed power rating |
| Power Rating, Watts | 2.0 at 40°C derating to 0 at 85°C |
| Dielectric Strength | 1,000V rms |
| Insulation Resistance, Minimum | 1,000 Megohms |
| Noise, Maximum | 100 Ohms (250 Ohms: RT ≤500 Ohms) |
| Actual Electrical Travel | 352° ±2° Continuous model 350° ±2° Stop model |
| Tap Tolerance | ±1° (±2° <100 Ohms) |
| End Voltage, Maximum | Linearity x Input Voltage |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -25°C to +85°C |
| Temperature Cycling | 5 cycles, -25°C to +85°C (5% ΔR) |
| Shock, 6ms Sawtooth | 100G's (0.1ms discontinuity max.) |
| Vibration | 10G's, 10 to 500 Hz (5% ΔR, 0.1ms discontinuity max.) |
| Moisture Resistance | Five 24 hour cycles (3% ΔR) |
| High Temperature Exposure | 1,000 hours at 85°C (5% ΔR) |
| Rotational Load Life | 500K shaft rev. at rated wattage at 85°C (5% ΔR) |

Specifications subject to change without notice.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT electronics plc

TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Single-Turn Precision Potentiometer

Model 5311



Mechanical

| Total Mechanical Travel | 360° Continuous model 350° ±2° Stop model |
|--|--|
| Number of Gangs, Maximum | 1 |
| Weight, Nominal | 1.5 oz. |
| Static Stop Strength | 48 oz.-in. |
| Shaft End Play, Maximum | .007" |
| Shaft Runout, T.I.R., Maximum | .0025" |
| Pilot Diameter Runout, T.I.R., Maximum | .0025" |
| Lateral Runout, T.I.R., Maximum | .003" |
| Shaft Radial Play, Maximum | .004" |
| Starting Torque, Maximum | 1.0 oz.-in. |
| Running Torque, Maximum | 0.7 oz.-in. |

Standard Resistance Values, Ohms

| Total Resistance | Theoretical Resolution (% Nominal) | Tempco of Wire |
|------------------|------------------------------------|----------------|
| 10 | 0.491 | ± 20 ppm/°C |
| 100 | 0.233 | ± 20 ppm/°C |
| 500 | 0.187 | ± 20 ppm/°C |
| 1K | 0.150 | ± 20 ppm/°C |
| 2K | 0.117 | ± 20 ppm/°C |
| 5K | 0.090 | ± 20 ppm/°C |
| 10K | 0.073 | ± 20 ppm/°C |
| 20K | 0.066 | ± 20 ppm/°C |
| 30K | 0.060 | ± 20 ppm/°C |

METRIC CONVERSIONS

| | | | |
|-------|---------|-----------|-----------|
| 1 in. | 25.4mm | 1 oz.-in. | 0,007 N-m |
| 1 oz. | 28.4 gm | 1 lb.-in. | 0,113 N-m |

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

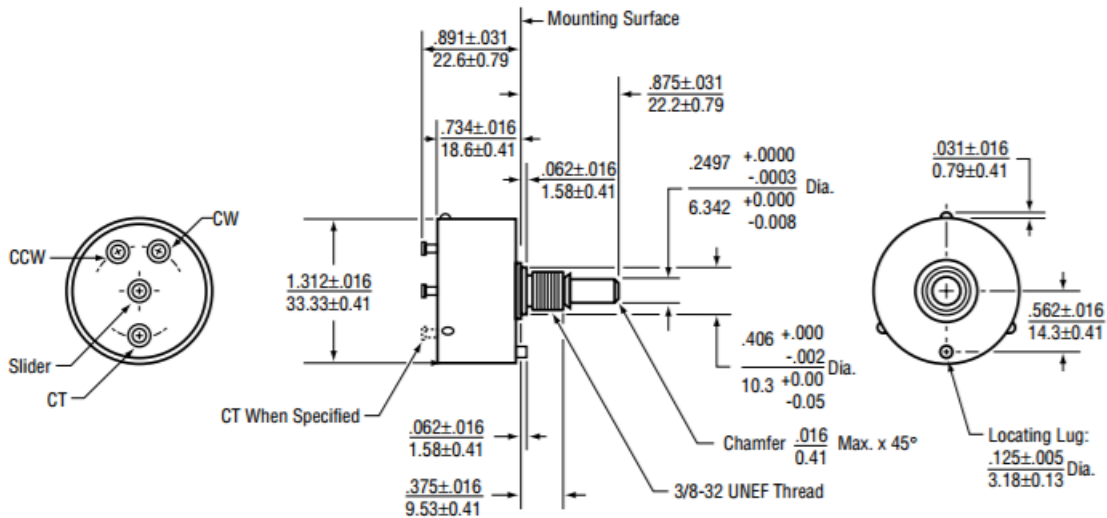
© TT electronics plc

TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Issue C 04/2019 Page 2

Single-Turn Precision Potentiometer

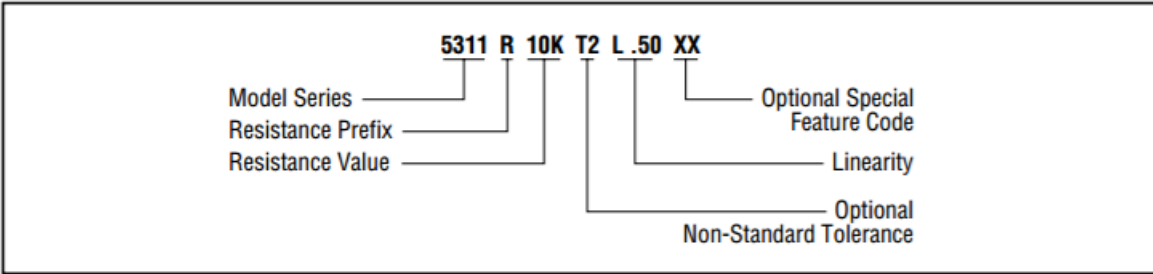
Model 5311



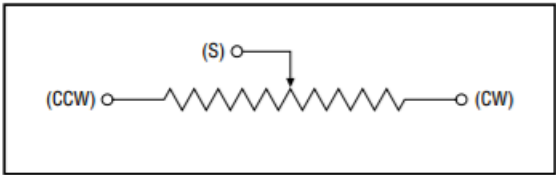
SPECIAL FEATURES

| | |
|----------------|----|
| Center Tap | CT |
| Linearity Tape | LT |
| Flatted Shaft | FS |
| Slotted Shaft | SS |
| Shaft Lock | SL |
| Stop | ST |

ORDERING INFORMATION



CIRCUIT DIAGRAM



NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:
 Linear = ± .01 inches (.25mm)
 Angular = ± 2 degrees

General Note
 TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9