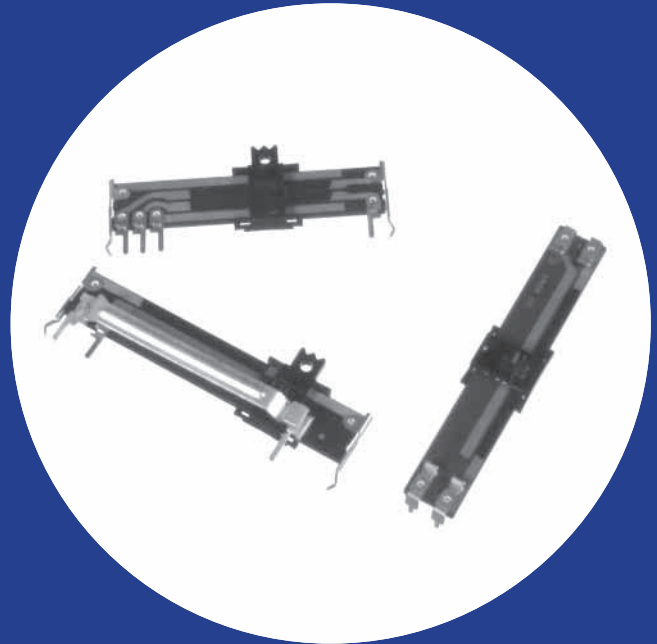


## Commercial Linear Motion Carbon Composition Slide Potentiometer

### Features

- 10-60mm slider travel
- Innovative AC power switch (SPST, SPDT)
- Center, Multiple detents available
- Single or dual element designs
- Economical
- Wide resistance range
- Slim construction
- RoHS Compliant



Patent No.: US: 5,959,525 , Taiwan: 204502.

### Electrical and Mechanical Specifications

#### Resistance Range

500 ohms through 1 megohms, linear  
Consult CTS for audio taper

#### Resistance Tolerance

±30%, ±20%, ±10%

#### Insulation Resistance

10 Megohms minimum at 250 VDC

#### Maximum Operating Voltage

| Taper      | 10mm   | 15mm<br>20mm     | 30mm   | 45mm   | 60mm   |
|------------|--------|------------------|--------|--------|--------|
| Linear     | 100VDC | 150VDC<br>200VDC | 250VDC | 300VDC | 500VDC |
| Non-linear | 50VDC  | 50VDC<br>150VDC  | 200VDC | 250VDC | 300VDC |

#### Power Rating, watts

| Taper      | 10mm   | 15mm<br>20mm | 30mm | 45mm  | 60mm  |
|------------|--------|--------------|------|-------|-------|
| Linear     | 0.05w  | 0.1w         | 0.2w | 0.25w | 0.5w  |
| Non-linear | 0.025w | 0.05w        | 0.1w | 0.15w | 0.25w |

#### Power Switch (optional)

SPST - 10,000 cycles carrying 1,000 watts 120 VAC  
(Tungsten-filament)

SPDT - 10,000 cycles carrying 600 watts 120 VAC  
(Tungsten-filament)

#### Slide Travel

Potentiometer without switch:

X and U Style: 10, 15, 20, 30, 45, and 60mm

V Style: 10, 15, 25, 40, and 55mm

Potentiometer with switch:

30mm = 27mm electrical + 3mm switch (SPST only)

20mm = 17mm electrical + 3mm switch

#### Operating Force

Potentiometer : 20-150 g

Switch : 100-500 g

#### Stop Strength

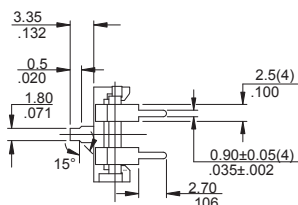
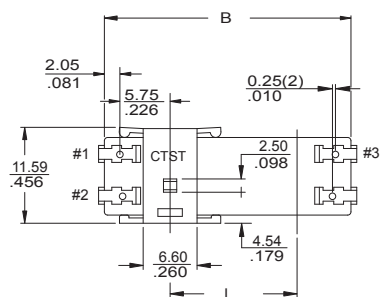
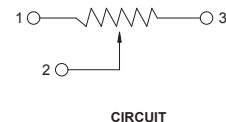
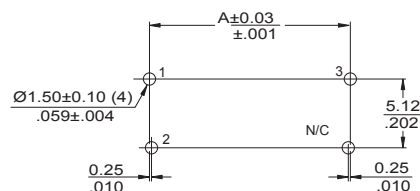
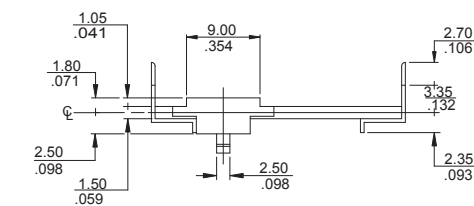
3K gf maximum, measured at base of slider

#### Operating Life

Standard : 10,000 cycles

Special : 100,000 , 250,000 cycles

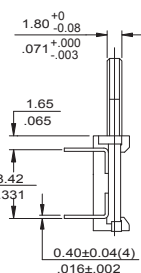
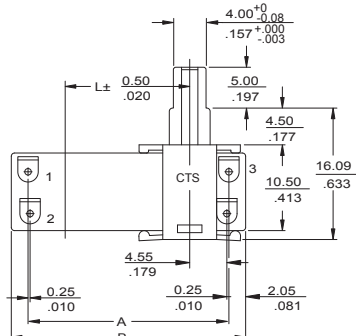
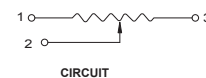
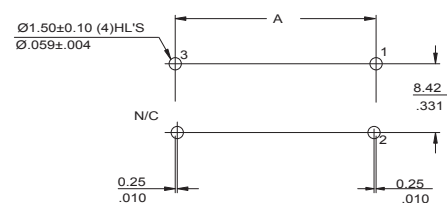
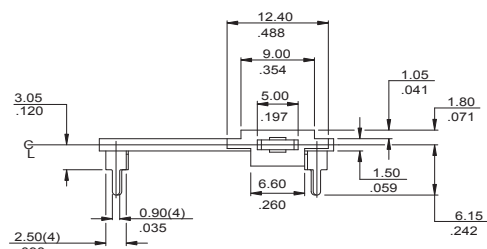
## TYPE 448V MONO



| MODEL    | DIMENSIONS |             |             |
|----------|------------|-------------|-------------|
|          | L (Travel) | A           | B           |
| 448V-10M | 10/ .394   | 30.20/1.189 | 28.70/1.130 |
| 448V-15M | 15/ .591   | 35.20/1.387 | 33.70/1.372 |
| 448V-25M | 25/ .984   | 45.20/1.180 | 43.70/1.721 |
| 448V-40M | 40/ 1.575  | 60.20/2.370 | 58.70/2.311 |
| 448V-55M | 55/ 2.166  | 75.20/2.961 | 73.70/2.902 |

DIMENSION: mm  
INCH

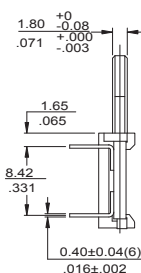
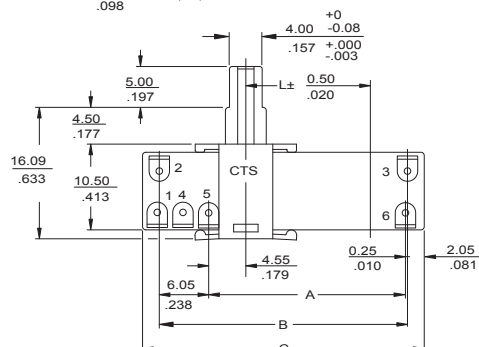
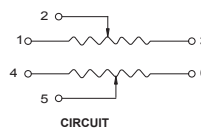
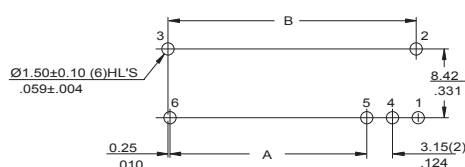
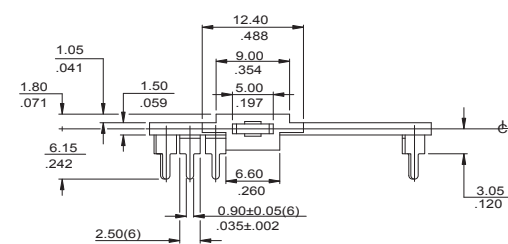
## TYPE 448U MONO



| MODEL    | DIMENSIONS |             |             |
|----------|------------|-------------|-------------|
|          | L(Travel)  | A           | B           |
| 448U-10M | 10/ .394   | 19.60/ .772 | 23.70/ .933 |
| 448U-15M | 15/ .591   | 24.60/ .969 | 28.70/1.130 |
| 448U-20M | 20/ .787   | 29.60/1.165 | 33.70/1.327 |
| 448U-30M | 30/ 1.181  | 39.60/1.559 | 43.70/1.720 |
| 448U-45M | 45/ 1.772  | 54.60/2.149 | 58.70/2.311 |
| 448U-60M | 60/ 2.362  | 69.60/2.740 | 73.70/2.902 |

DIMENSION: mm  
INCH

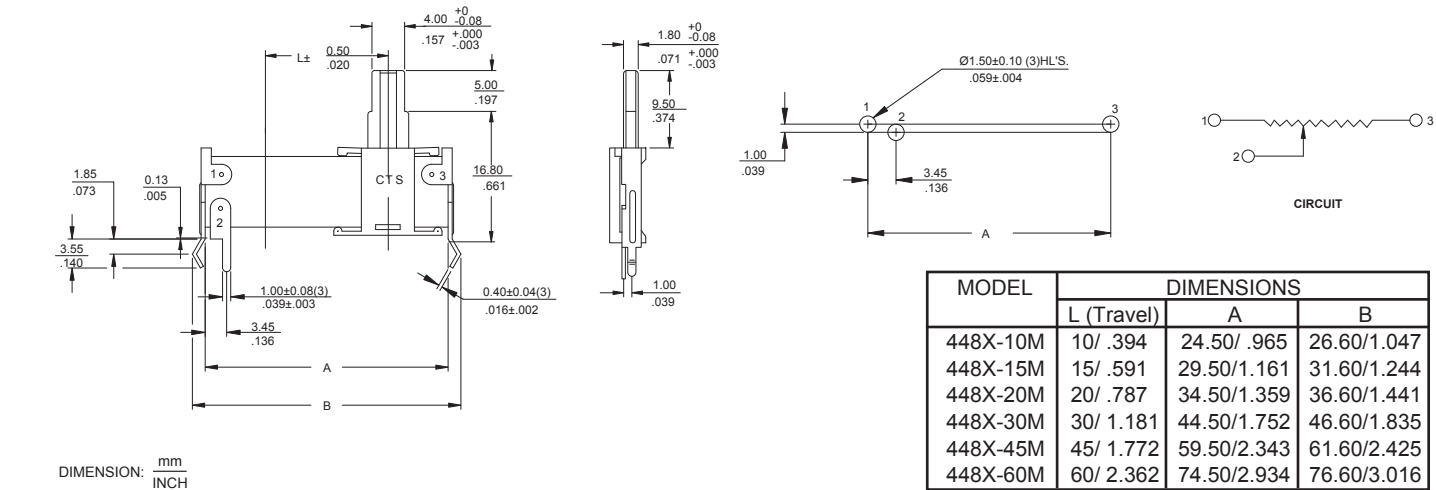
## TYPE 448U DUAL



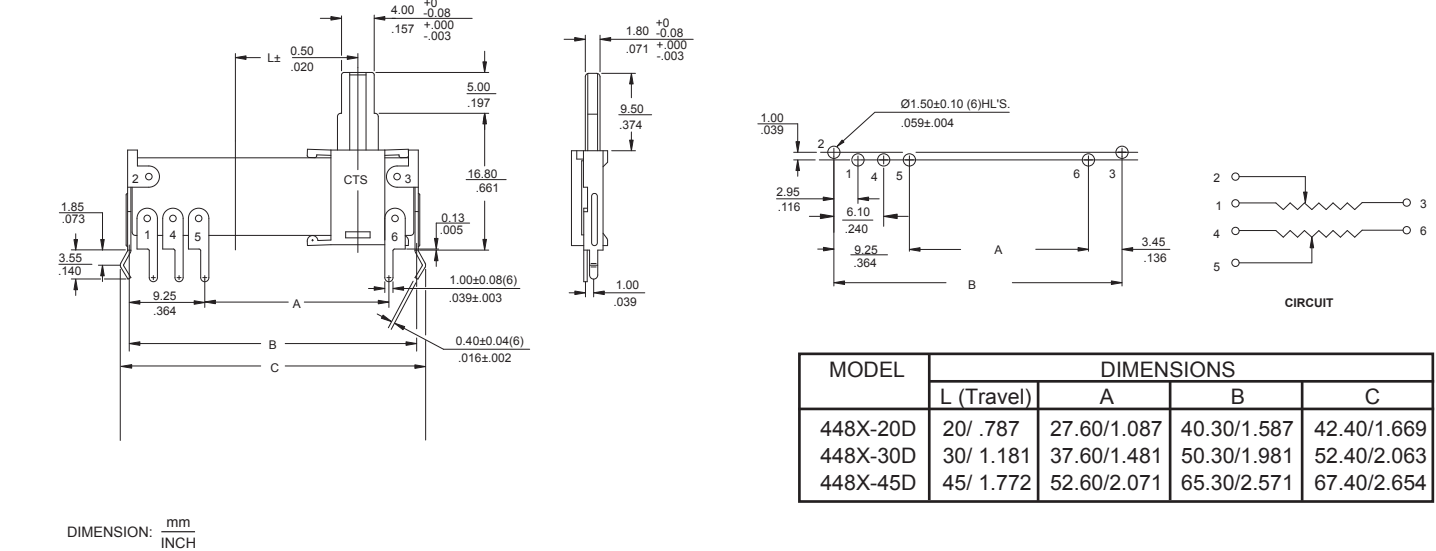
| MODEL    | DIMENSIONS |             |             |             |
|----------|------------|-------------|-------------|-------------|
|          | L(Travel)  | A           | B           | C           |
| 448U-20D | 20/ .787   | 29.10/1.146 | 35.40/1.394 | 39.50/1.555 |
| 448U-30D | 30/ 1.181  | 39.10/1.539 | 45.40/1.787 | 49.50/1.949 |
| 448U-45D | 45/ 1.772  | 54.10/2.130 | 60.40/2.378 | 64.50/2.539 |

DIMENSION: mm  
INCH

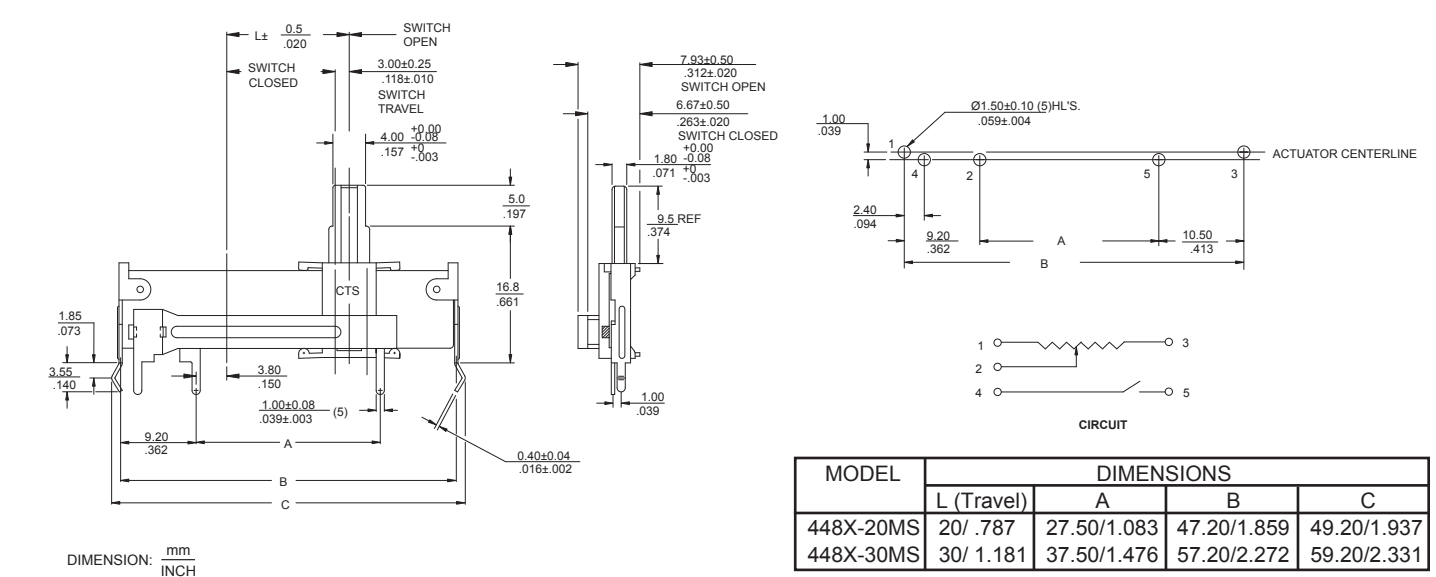
TYPE 448X MONO



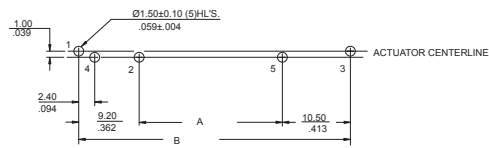
TYPE 448X DUAL



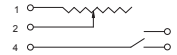
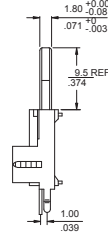
TYPE 448X MONO W/SPST SWITCH



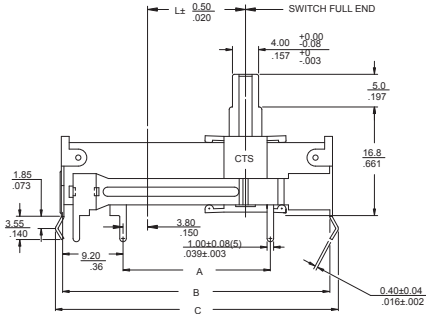
## TYPE 448X MONO W/SPDT SWITCH (with style A actuator only)



DIMENSION:  $\frac{\text{mm}}{\text{INCH}}$

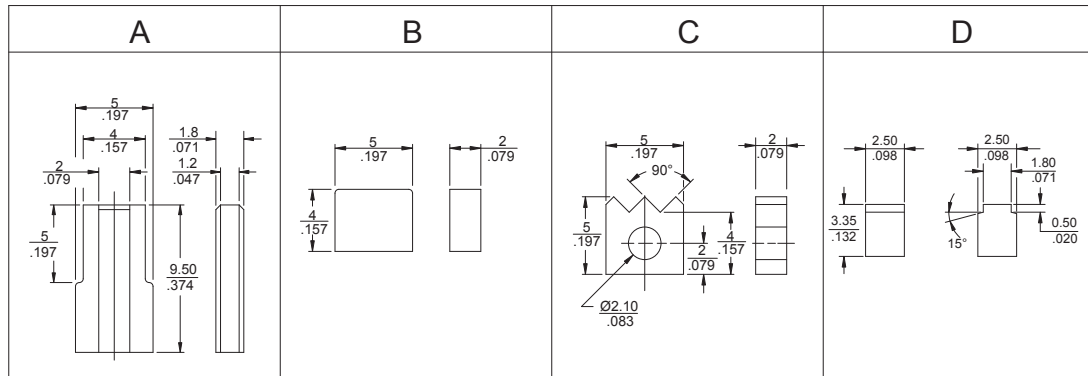


CIRCUIT



| MODEL     | DIMENSIONS |             |             |             |
|-----------|------------|-------------|-------------|-------------|
|           | L (Travel) | A           | B           | C           |
| 448X-20MS | 20/ .787   | 27.50/1.083 | 47.20/1.859 | 49.20/1.937 |

## 448 Series Actuator Styles



## Ordering Information

| 448                                                                                                                                                              | U                                                                                                                                             | E                                                                                                                                                 | 2                                                                                                                             | 102                                                          | B                                                                | D                                                                                                                                                                                                         | N |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| <b>MOUNTING STYLE</b><br>U- ACTUATOR PARALLEL TO PC BOARD<br>X- ACTUATOR PERPENDICULAR TO PC BOARD<br>V- ACTUATOR (Low Profile) PERPENDICULAR TO PCB (mono only) | <b>TRAVEL</b><br>U & X TYPES V-TYPE<br>A- 10mm A- 10mm<br>B- 15mm B- 15mm<br>C- 20mm C- 25mm<br>D- 30mm D- 40mm<br>E- 45mm E- 55mm<br>F- 60mm | <b>RESISTANCE CODE (EXAMPLES)</b><br>CODE RESISTANCE<br>501 500 ohms<br>102 1K<br>252 2.5K<br>502 5K<br>103 10K<br>253 25K<br>503 50K<br>104 100K | <b>ACTUATOR STYLE</b><br>U & X TYPES V-TYPE<br>2- STYLE A: 9.5mm 1- STYLE D: 3.35mm<br>3- STYLE B: 4.0mm<br>4- STYLE C: 5.0mm | <b>RESISTANCE TOLERANCE</b><br>A- ±10%<br>B- ±20%<br>C- ±30% | <b>TAPER</b><br>D- LINEAR<br>A- CW 10% AUDIO<br>B- CCW 10% AUDIO | <b>SPECIALS</b><br>N- NO SPECIALS<br>C- CENTER DETENT<br>M- MULTIPLE DETENTS (30mm only)<br>S- SPST POWER SWITCH (20 & 30mm, X type only)<br>D- SPDT POWER SWITCH (20 mm, X type and 9.5mm actuator only) |   |

Consult CTS for dual resistance element, customized, or not listed features.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.