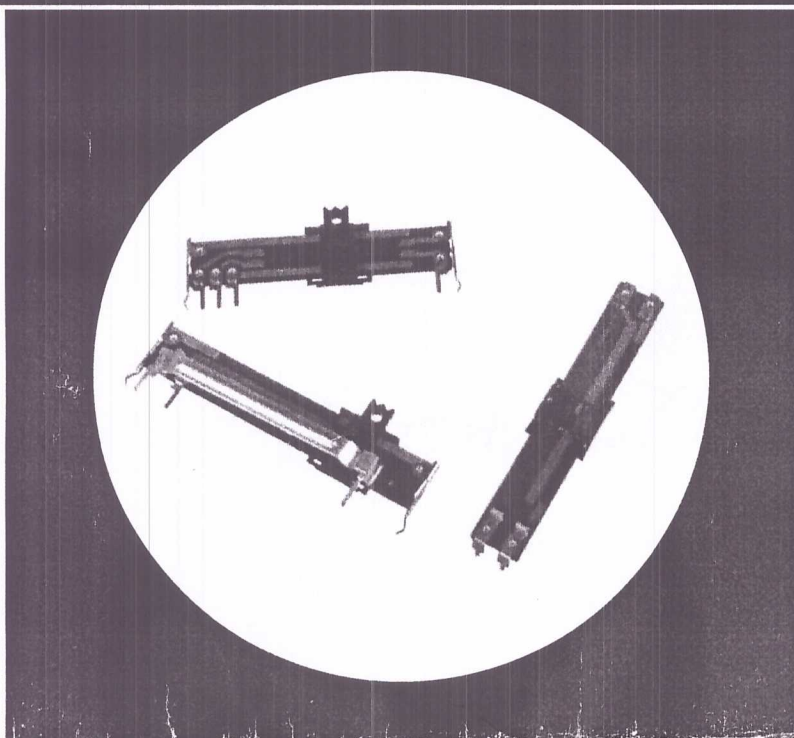


Commercial Linear Motion Carbon Composition Slide Potentiometer

Features

- 10-60mm slider travel
- Innovative AC power switch (SPST, SPDT)
- Center detent 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 20mm	30mm	45mm	60mm
Linear	100VDC	150VDC 200VDC	250VDC	300VDC	500VDC
Non-linear	50VDC	50VDC 150VDC	200VDC	250VDC	300VDC

Power Rating, watts

Taper	10mm	15mm 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



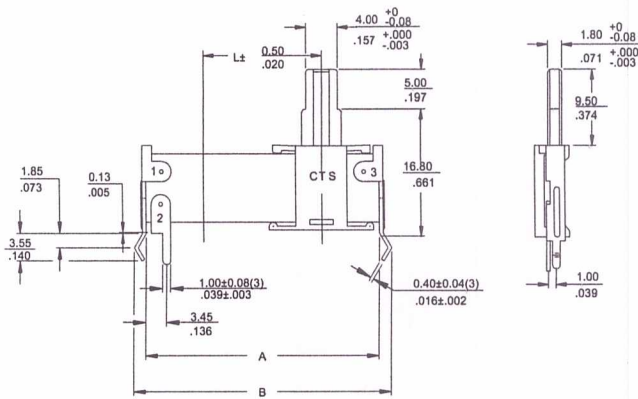
TYPE 448U MONO



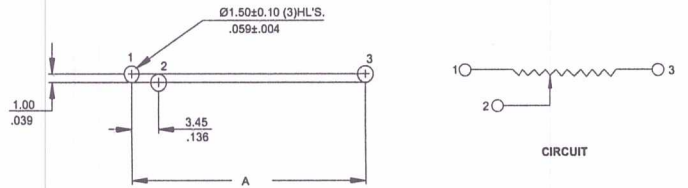
TYPE 448U DUAL



TYPE 448X MONO

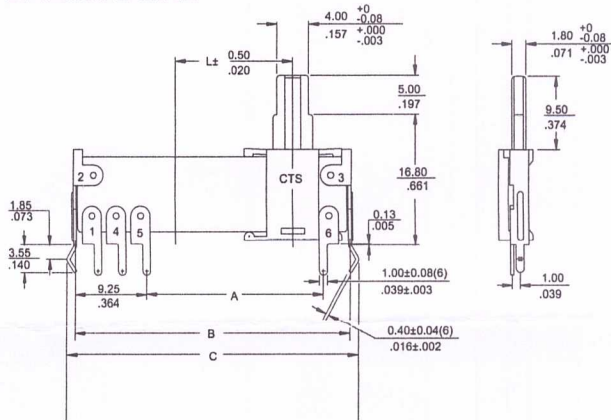


DIMENSION: $\frac{\text{mm}}{\text{INCH}}$

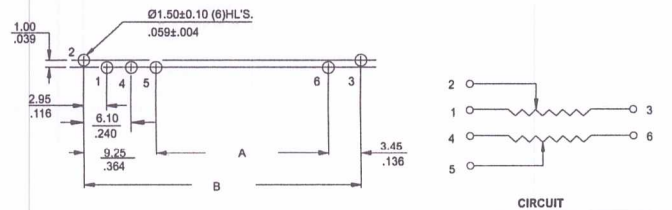


MODEL	DIMENSIONS		
	L (Travel)	A	B
448X-10M	10/ .394	24.50/ .965	26.60/1.047
448X-15M	15/ .591	29.50/1.161	31.60/1.244
448X-20M	20/ .787	34.50/1.359	36.60/1.441
448X-30M	30/ 1.181	44.50/1.752	46.60/1.835
448X-45M	45/ 1.772	59.50/2.343	61.60/2.425
448X-60M	60/ 2.362	74.50/2.934	76.60/3.016

TYPE 448X DUAL

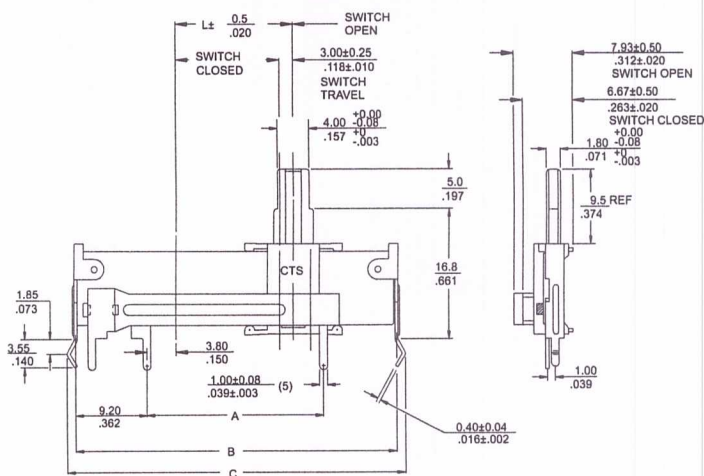


DIMENSION: $\frac{\text{mm}}{\text{INCH}}$

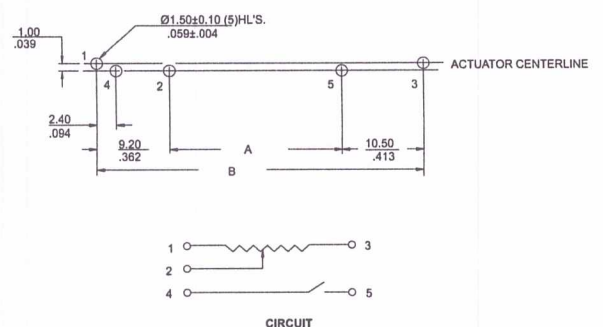


MODEL	DIMENSIONS			
	L (Travel)	A	B	C
448X-20D	20/ .787	27.60/1.087	40.30/1.587	42.40/1.669
448X-30D	30/ 1.181	37.60/1.481	50.30/1.981	52.40/2.063
448X-45D	45/ 1.772	52.60/2.071	65.30/2.571	67.40/2.654

TYPE 448X MONO W/SPST SWITCH

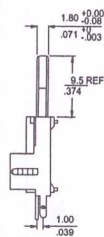
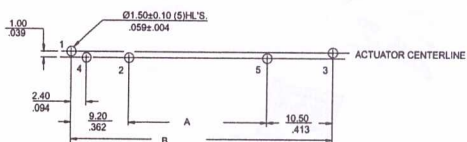


DIMENSION: $\frac{\text{mm}}{\text{INCH}}$

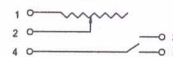


MODEL	DIMENSIONS			
	L (Travel)	A	B	C
448X-20MS	20/ .787	27.50/1.083	47.20/1.859	49.20/1.937
448X-30MS	30/ 1.181	37.50/1.476	57.20/2.272	59.20/2.331

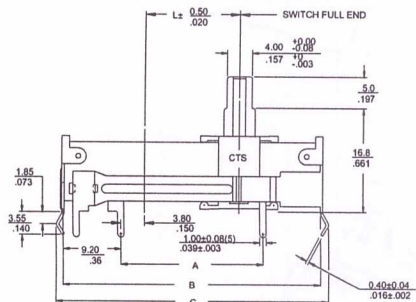
TYPE 448X MONO W/SPDT SWITCH (with style A actuator only)



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

A	B	C	D

Ordering Information

448

U

E

2

102

B

D

N

MOUNTING STYLE
U- ACTUATOR PARALLEL TO PC BOARD
X- ACTUATOR PERPENDICULAR TO PC BOARD
V- ACTUATOR (Low Profile) PERPENDICULAR TO PCB (mono only)

TRAVEL	
U & X TYPES	V-TYPE
A- 10mm	A- 10mm
B- 15mm	B- 15mm
C- 20mm	C- 25mm
D- 30mm	D- 40mm
E- 45mm	E- 55mm
F- 60mm	

RESISTANCE CODE (EXAMPLES)	
CODE	RESISTANCE
501	500 ohms
102	1K
252	2.5K
502	5K
103	10K
253	25K
503	50K
104	100K

TAPER	
D- LINEAR	
A- CW 10% AUDIO	
B- CCW 10% AUDIO	

ACTUATOR STYLE	
U & X TYPES	V-TYPE
2- STYLE A: 9.5mm	1- STYLE D: 3.35mm
3- STYLE B: 4.0mm	
4- STYLE C: 5.0mm	

RESISTANCE TOLERANCE
A- $\pm 10\%$
B- $\pm 20\%$
C- $\pm 30\%$

SPECIALS	
N-	NO SPECIALS
C-	CENTER DETENT
S-	SPST POWER SWITCH (20 & 30mm, X type only)
D-	SPDT POWER SWITCH (20 mm, X type and 9.5mm actuator only)

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