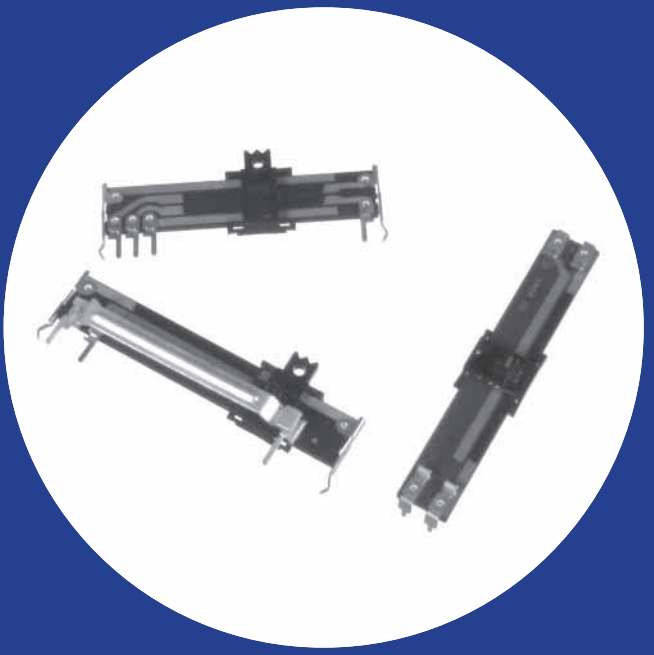
Series 448 Data Sheet
Slide Potentiometer

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

Maxium 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

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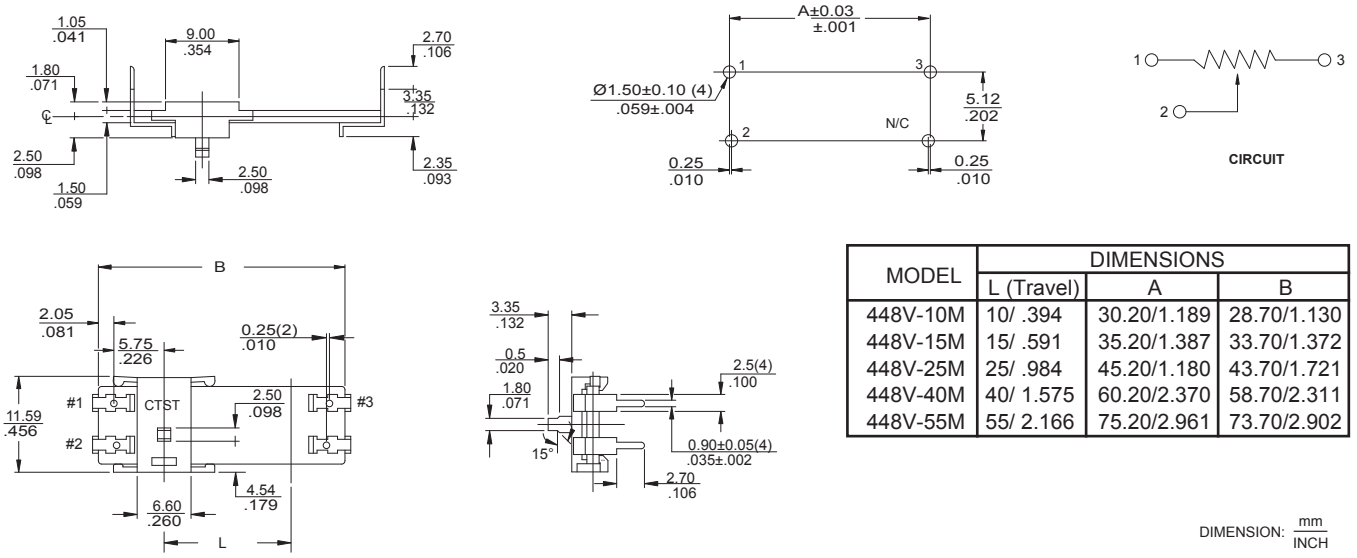
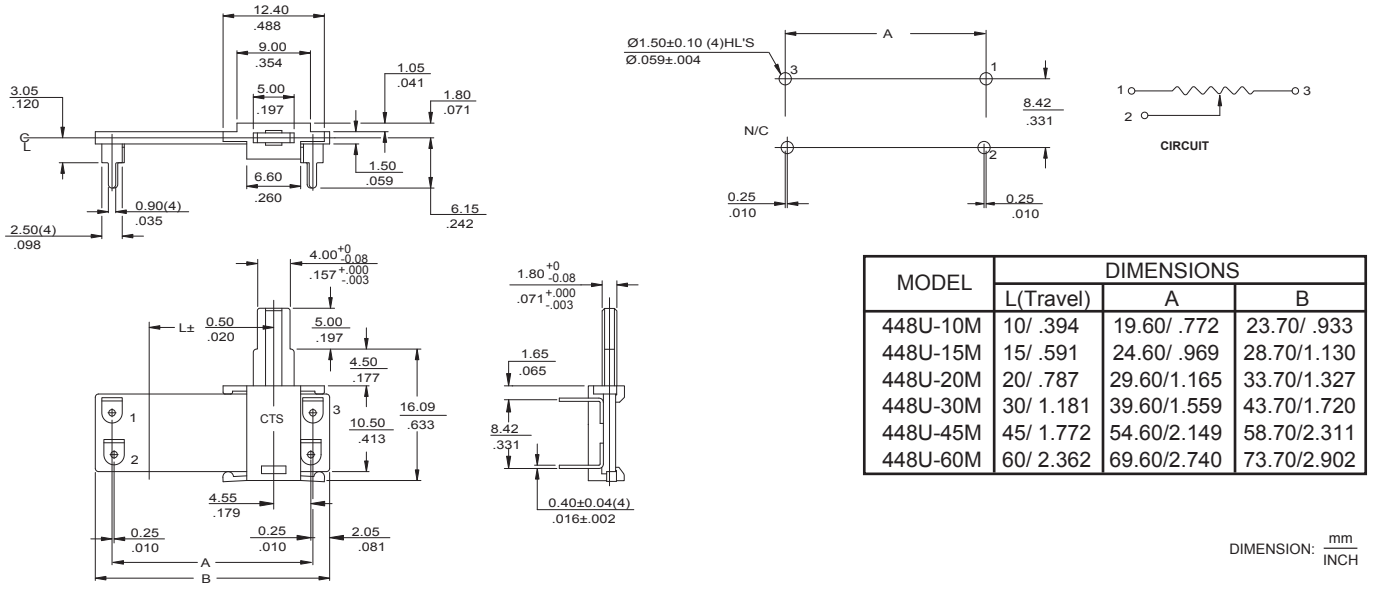
TYPE 448V MONO



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

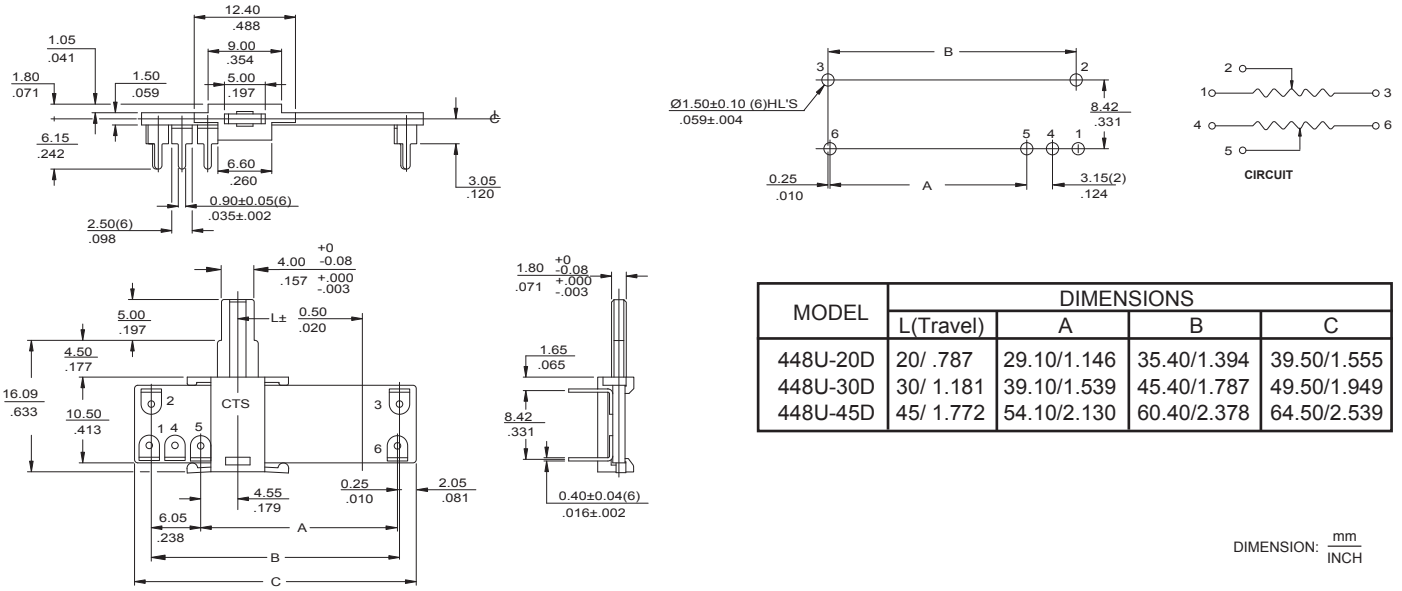
TYPE 448U MONO



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

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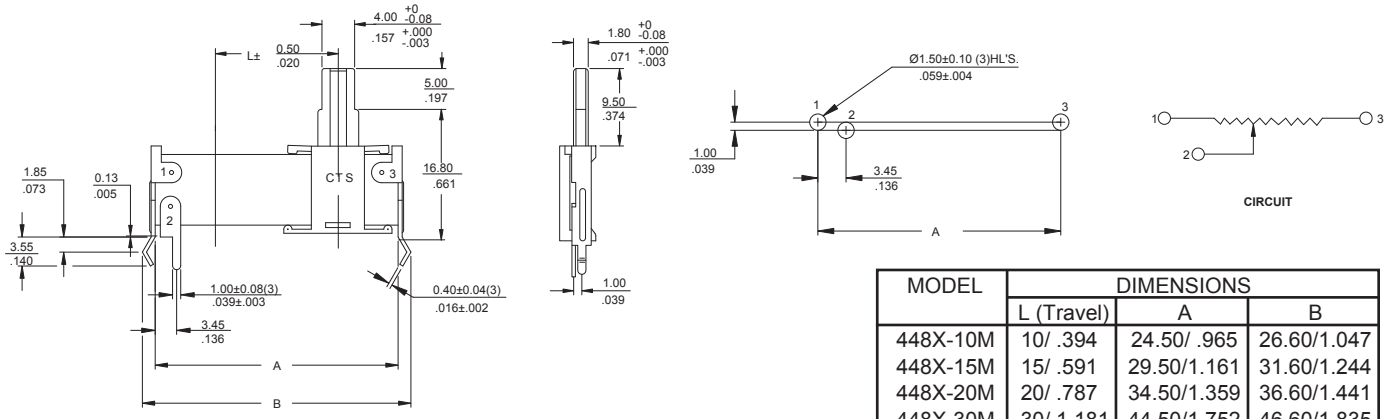
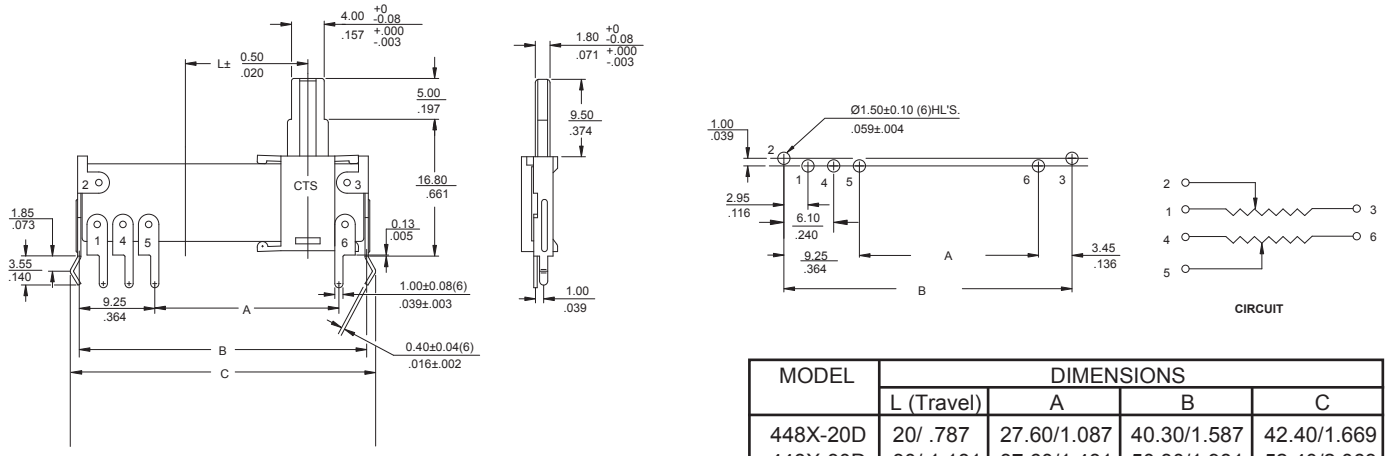
TYPE 448X MONO



DIMENSION: mm / 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

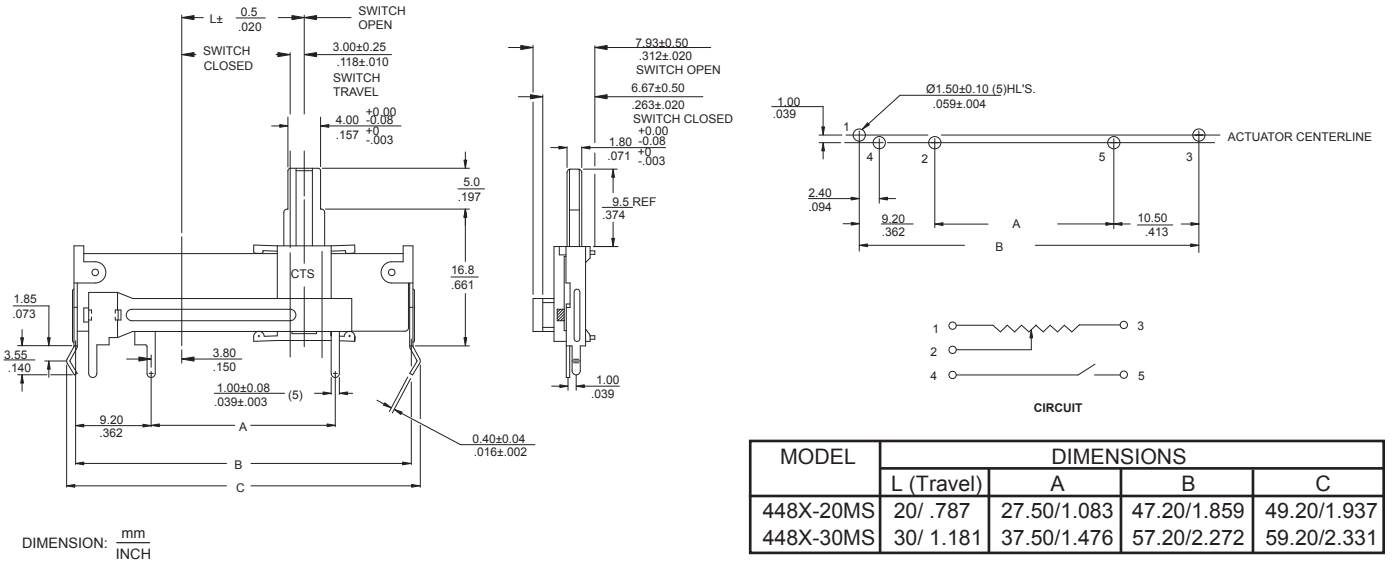
TYPE 448X DUAL



DIMENSION: mm / 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: mm / 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

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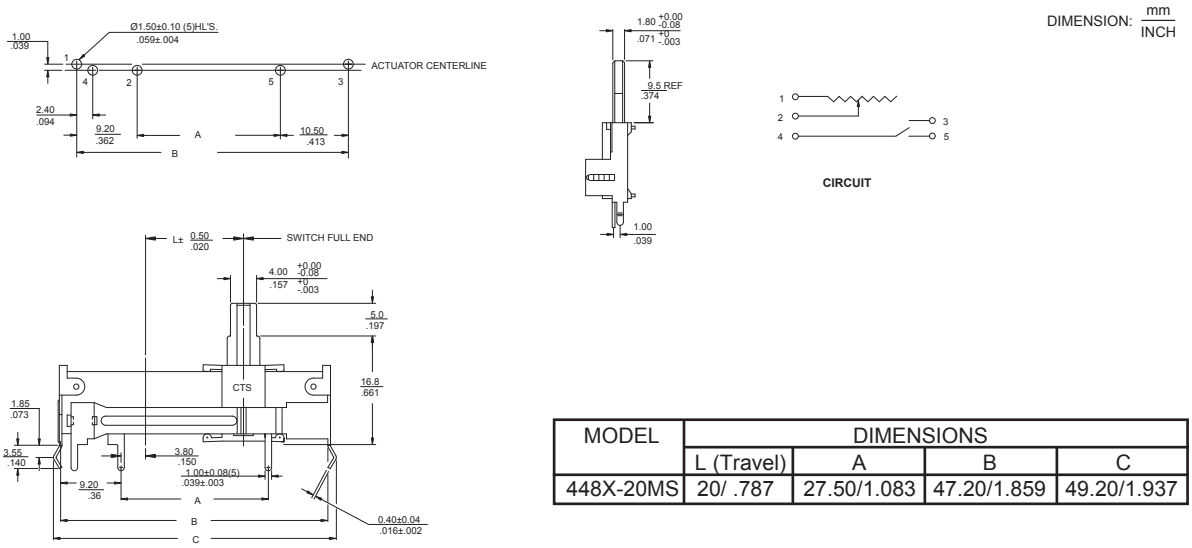
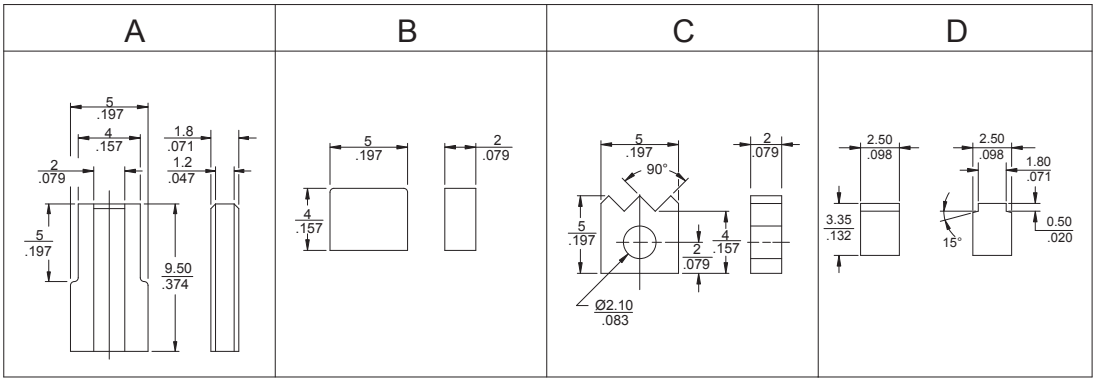
TYPE 448X MONO W/SPDT SWITCH (with style A actuator only)



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

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	

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 CODE (EXAMPLES)

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

RESISTANCE TOLERANCE
- **A-** ±10%
- **B-** ±20%
- **C-** ±30%

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

SPECIALS
- **N-** NO SPECIALS
- **C-** CENTER DETENT
- **M-** MULTIPLE DETENTS (30mm only)
- **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.

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ООО «ЛайфЭлектроникс» “LifeElectronics” LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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