

Slim Slide Potentiometer

PSS1 Series



Features:

- Resistance range 1 k Ω to 1 M Ω
- Temperature range -10°C to +70°C
- Rotational cycles of 15,000 minimum
- Single gang
- Center tap and detent options
- RoHS compliant

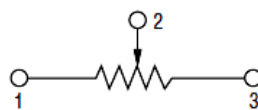


Description:

Slim slide single gang potentiometer. Options include 20mm or 30 mm slide travel; center tap and center detent.

Applications:

- Electric guitars
- Amplifiers
- Mixers
- Drum machines
- Synthesizers



SCHEMATIC

Single Gang

3D Model

To view 3D model:
1) Enable 3D content
2) Click and drag below



If unable to view 3D content,
[download and save this PDF](#)
to your computer and open it
in Adobe Acrobat Reader.

Electrical Characteristics

T_A = 25°C unless otherwise noted

Resistance Range	1 k Ω to 1 M Ω
Standard Resistance Tolerance	500 Ω < R < 1 M Ω : \pm 20% R \leq 500 Ω or R \geq 1 M Ω : \pm 30%
Residual Resistance	Term. 1~2: Less than 30 Ω Term: 2~3: Less than 50 Ω
Resistance Taper	B,W
Maximum Operating Voltage	50 Vac/10 Vdc
Rated Power	0.025 W
Dielectric Strength	1 minute at 250 Vac
Sliding Noise	Less than 100 mV
Insulation Resistance	More than 100 M Ω at 250 Vdc
Gang Error (Dual Unit)	N/A

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.

Mechanical Characteristics

T_A = 25°C unless otherwise noted

Slide Travel	20 mm, 30 mm
Operating Force	10 gf ~ 100 gf
Stopper Strength	3.0 kgf (from the base level to a point of 2mm)
Lever Deviation	30 ~ 150 gf
Lever Push-Pull Strength	3.0 kgf minimum at 10 seconds
Lever Wobble	2 (2XL)/20 mm (maximum) (L: level length both sides)
Operational Life	15,000 cycles minimum

Environmental Characteristics

T_A = 25°C unless otherwise noted

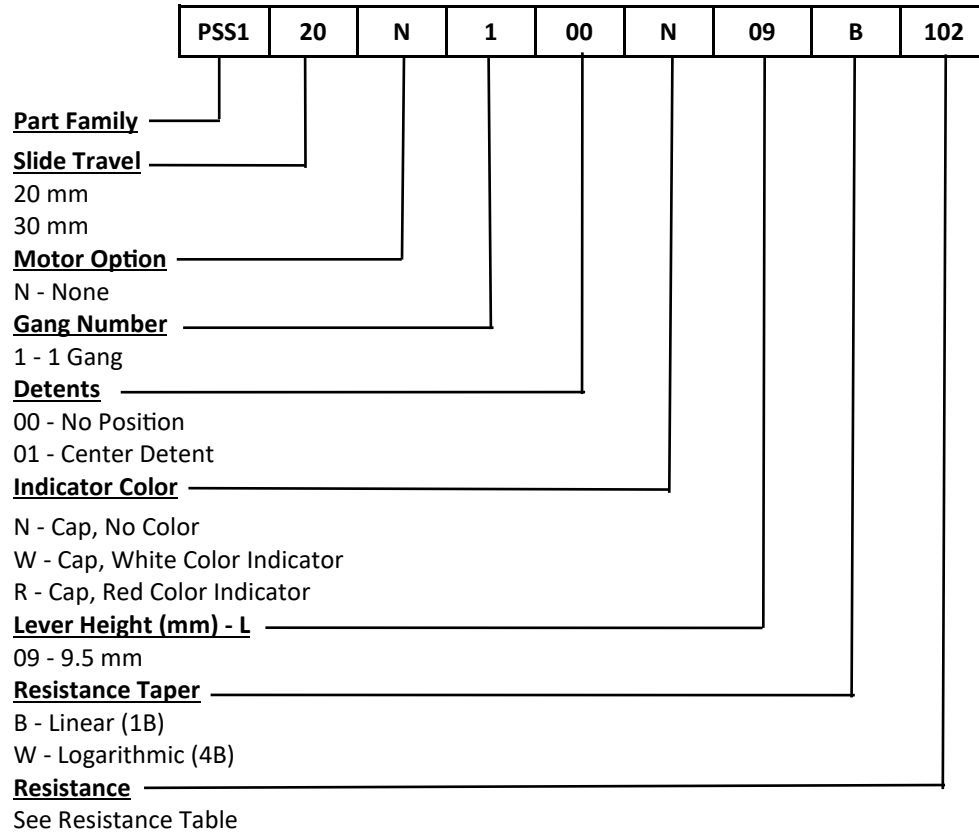
Operating Temperature	-10 °C to + 70 °C
IP Rating	IP 40
Soldering Condition	Wave Soldering 260 °C maximum for 1-3 seconds Hand Soldering 300° C maximum for 3 seconds
RoHS	Please refer to TT Electronics website
REACH	Please refer to TT Electronics website

Slim Slide Potentiometer

PSS1 Series



Ordering Information



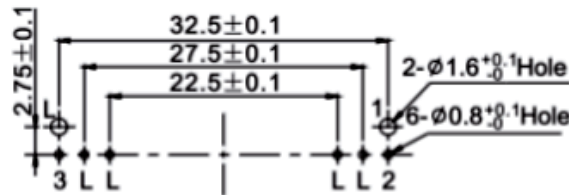
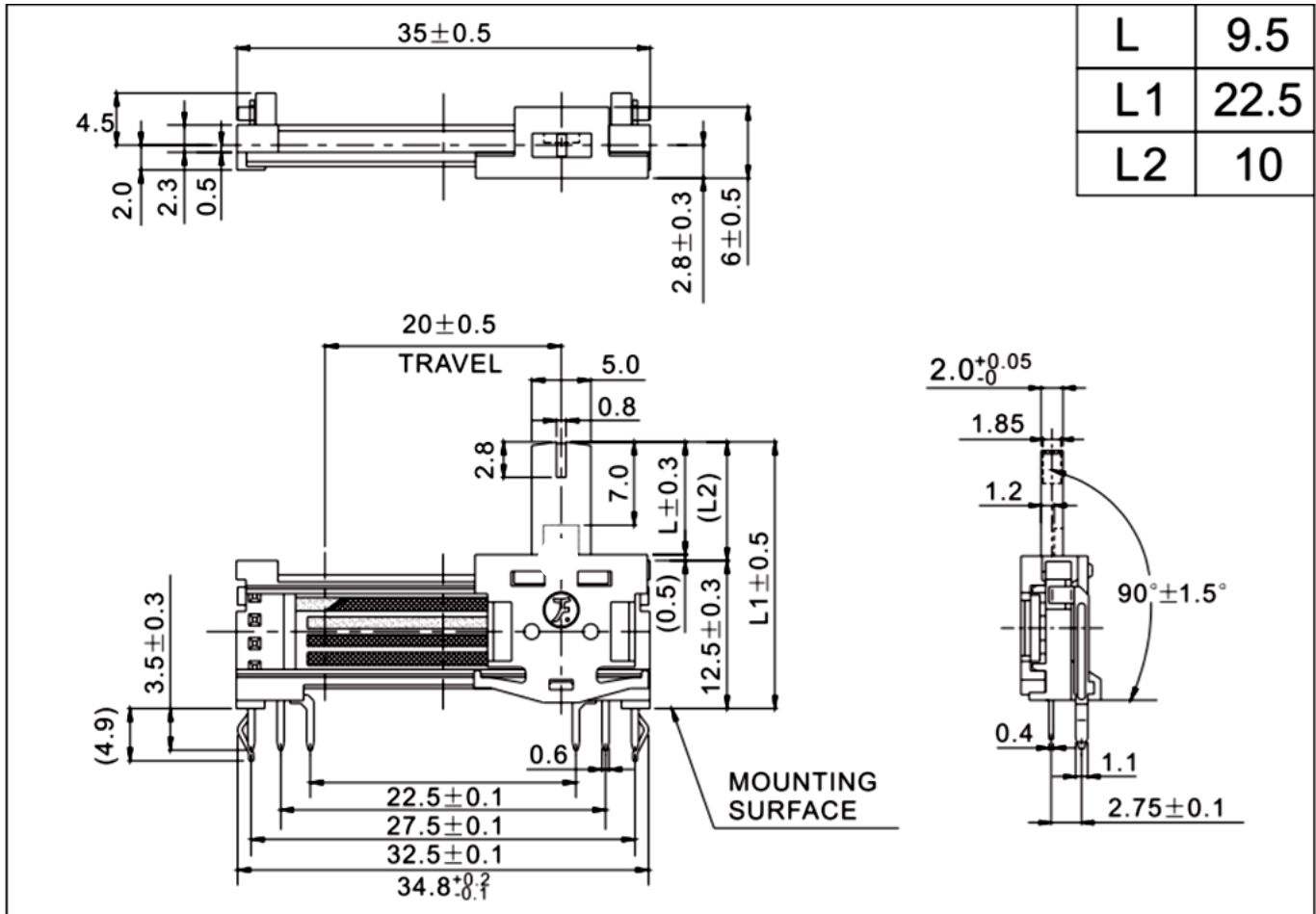
Resistance Table	
Resistance (Ohms)	Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

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 | BI Technologies
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Outline Drawings

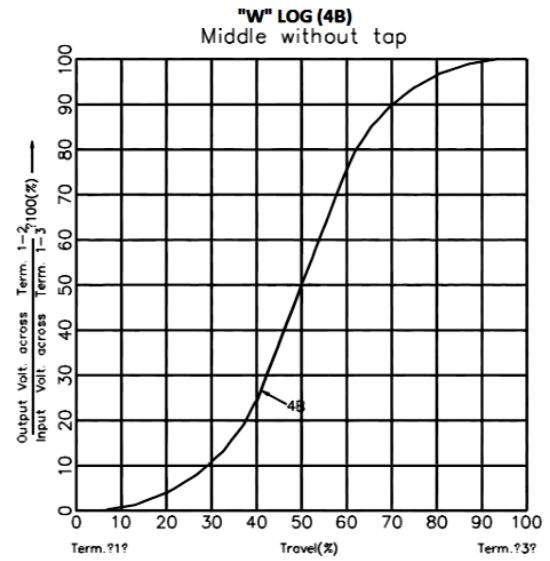
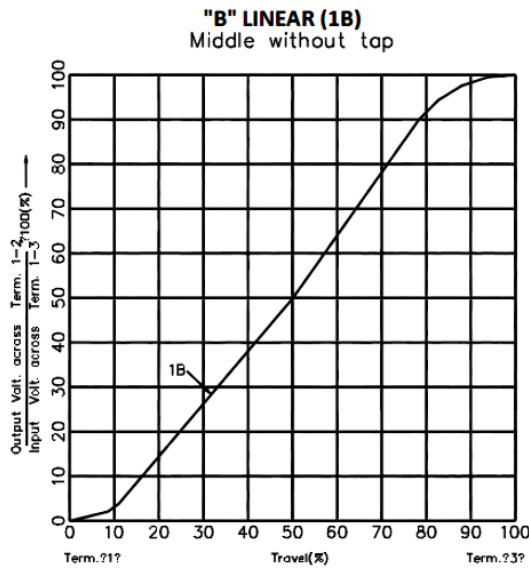
20 mm Travel



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 | BI Technologies
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Standard Tapers



Packaging

Standard Packaging	Plastic Trays
Hardware	N/A

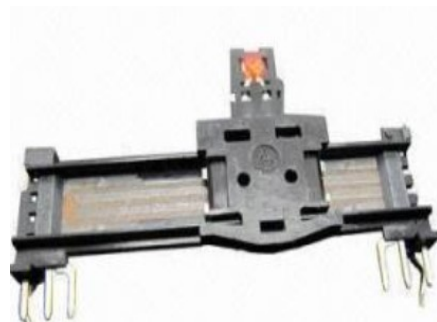
Slim Slide Potentiometer with 20/30 mm Travel, w/LED

PSS2 Series



Features:

- Dual gang
- Resistance range 1 kΩ to 1 MΩ
- Temperature range -10°C to +70°C
- Rotational cycles of 15,000 minimum
- With or without LED
- Vertical and horizontal mount versions
- RoHS compliant

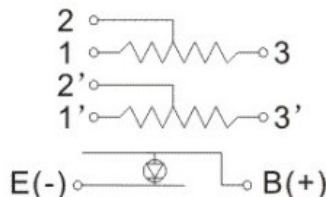


Description:

Slim slide dual gang potentiometer. Options include 20mm or 30 mm slide travel; with or without LED; center tap and center detent.

Applications:

- Electric guitars
- Amplifiers
- Mixers
- Drum machines
- Synthesizers



Schematic

3D Model

To view 3D model:
1) Enable 3D content
2) Click and drag below



If unable to view 3D content, [download and save](#) this PDF to your computer and open it in Adobe Acrobat Reader.

Electrical Characteristics

T_A = 25°C unless otherwise noted

Resistance Range	1 kΩ to 1 MΩ
Standard Resistance Tolerance	500 Ω < R < 1 MΩ: ±2.0% R ≤ 500 Ω or R ≥ 1 MΩ: ±30%
Residual Resistance	Term. 1~2: Less than 30 Ω Term. 2~3: Less than 50 Ω
Resistance Taper	B,W
Maximum Operating Voltage	50 Vac/10 Vdc
Rated Power	0.025 W
Dielectric Strength	1 minute at 250 Vac
Sliding Noise	Less than 100 mV
Insulation Resistance	More than 100 MΩ at 250 Vdc
Gang Error (Dual Unit)	±2 dB at the 50% travel point

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
Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 1

Document #: _____

Mechanical Characteristics

T_A = 25°C unless otherwise noted

Slide Travel	20 mm, 30 mm
Operating Force	10 gf ~ 100 gf
Stopper Strength	3.0 kgf (from the base level to a point of 2mm)
Lever Deviation	30 ~ 150 gf
Lever Push-Pull Strength	3.0 kgf min. at 10 seconds
Lever Wobble	2 (2XL)/20 mm (maximum) (L: level length both sides)
Operational Life	15,000 cycles minimum

Environmental Characteristics

T_A = 25°C unless otherwise noted

Operating Temperature	-10 °C to +70 °C
Soldering Condition	Wave soldering 260 °C max. for 1-3 seconds Hand soldering 300° C max. for 3 seconds
IP Rating	IP 40
RoHS	Please refer to TT Electronics website
REACH	Please refer to TT Electronics website

Ordering Information

PSS2	20	N	2	00	N	09	B	103
------	----	---	---	----	---	----	---	-----

Part Family

Slide Travel

20 mm

30 mm

Motor Option

N - None

Gang Number

2 - 2 Gangs

Detents

00 - No Position

01 - Center Detent

LED/Indicator Color

(See Note 1 page 6)

N - Cap, with No color indicator

W - Cap, with White Color indicator

R - LED, Red Color

Y - LED, Yellow Color

G - LED, Green Color

Lever Height (mm) - L

09 - 9.5 mm

Resistance Taper

B - Linear (3B)

W - Logarithmic (4B)

Resistance

See Resistance Table

Resistance Table	
Resistance (Ohms)	Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

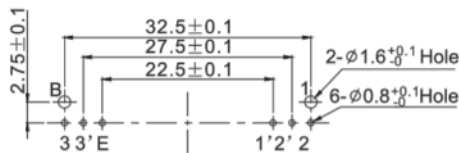
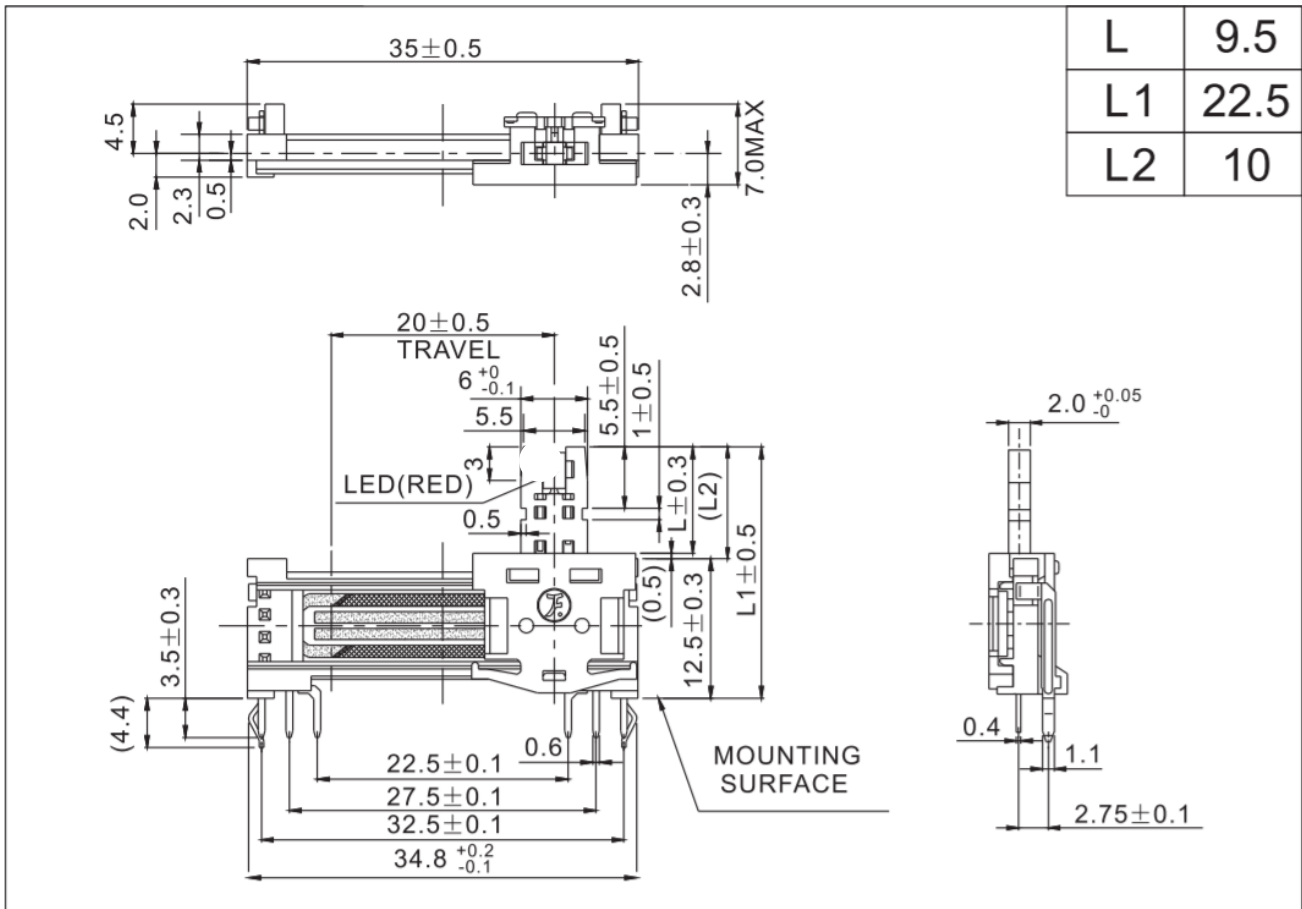
General Note

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

Outline Drawings

20 mm Travel, Standard Type, 2 Gangs, with LED



PCB layout Dimension

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.

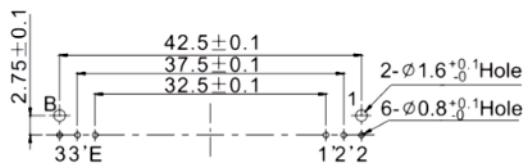
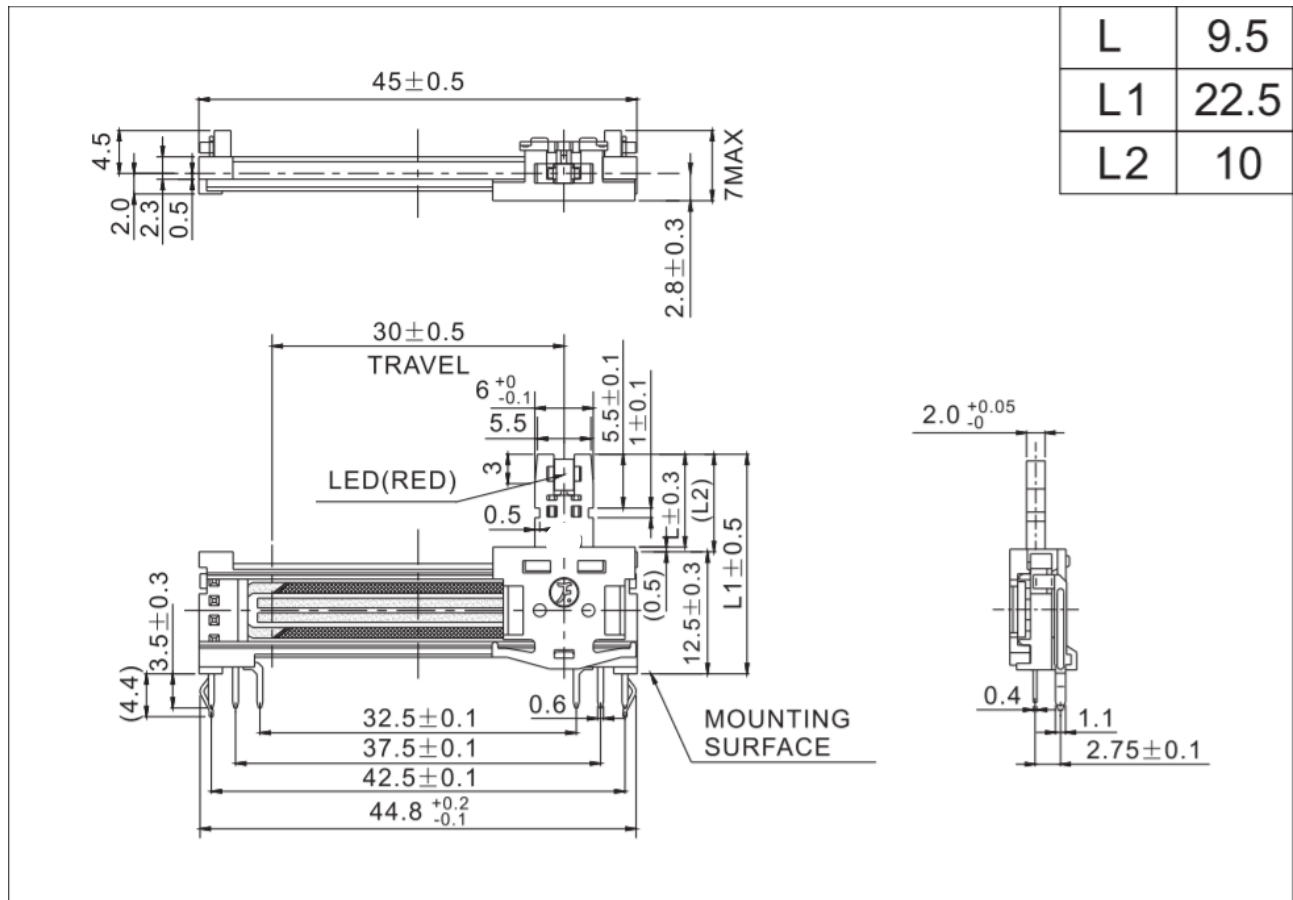
TT Electronics | BI Technologies
Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 4

Document #: _____

Outline Drawings

30 mm Travel, Standard Type, 2 Gangs, with LED



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.

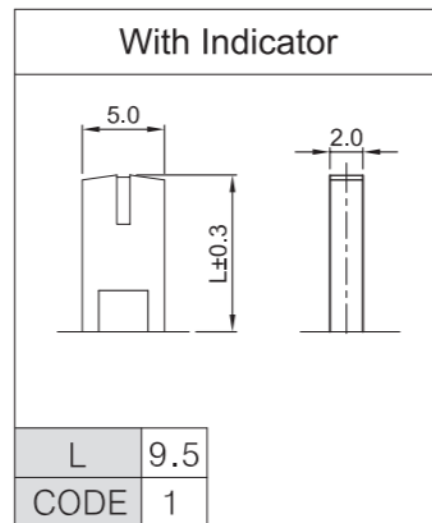
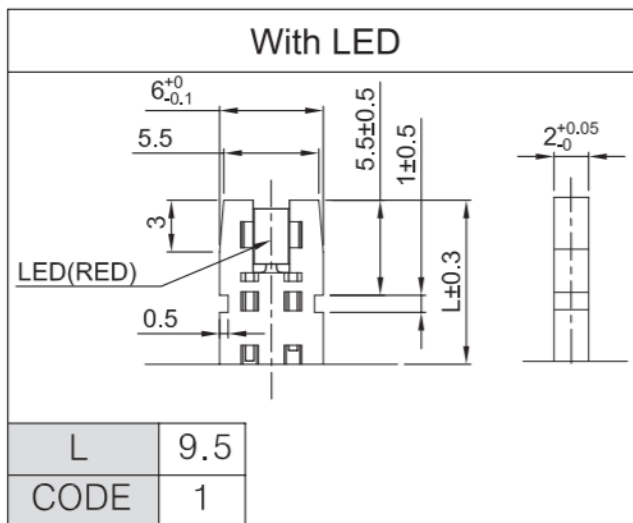
TT Electronics | BI Technologies
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 5

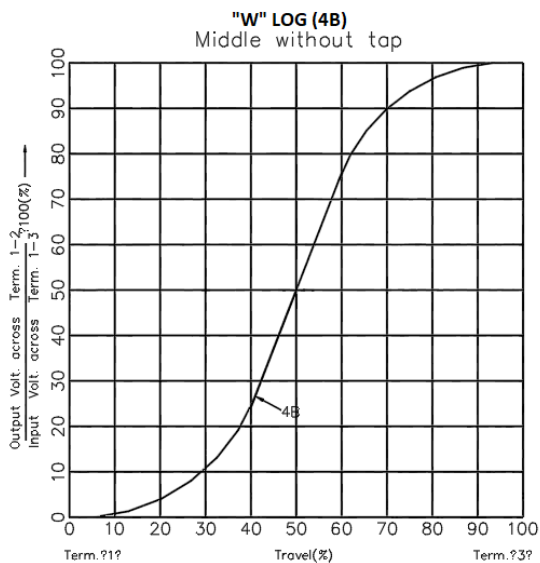
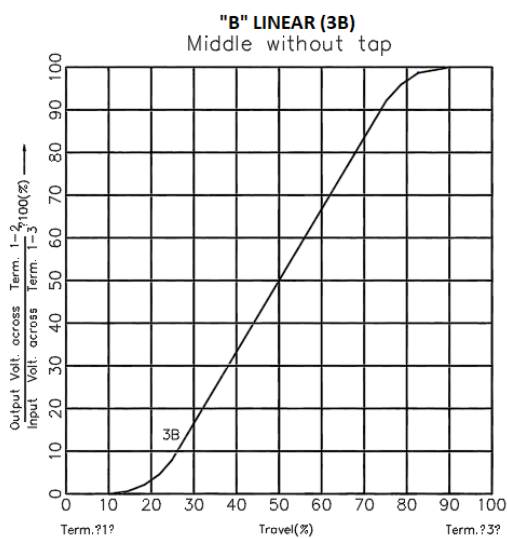
Document #: _____

Outline Drawings

Note 1: LED/Indicator Option



Standard Tapers



Packaging

Standard Packaging	Plastic Trays
Hardware	N/A

Slide Potentiometer

PSL2



Features:

- Operation life 300,000 minimum
- Resistance range 1 kΩ - 1 MΩ
- Smooth feel with dual rail internal system
- Dual track options available
- Range of taper resistance options

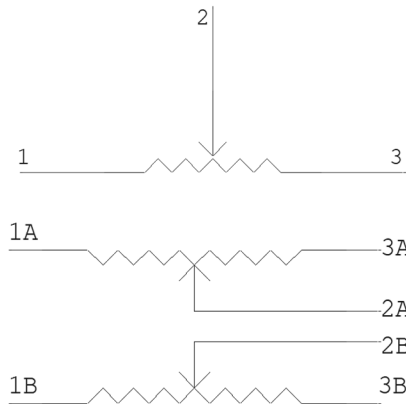


Description:

PS2 family of linear non-motorized potentiometers. This potentiometer is perfect for mixing boards and other audio visual equipment.

Applications:

- Audio mixers
- Video mixers
- Light boards
- Keyboards
- Musical instruments
- Stage equipment



3D Model

To view 3D model:
1) Enable 3D content
2) Click and drag below



If unable to view 3D content, download and save this PDF to your computer and open it in Adobe Acrobat Reader.

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Resistance Range	1 kΩ—1 MΩ
Standard Resistance Tolerance	1 kΩ- 1 MΩ $\pm 20\%$ R < 1 kΩ or R > 1 MΩ $\pm 30\%$
Resistance Taper	A,B,C
Maximum Operating Voltage	200 Vac / 10 Vdc
Rated Power	0.5 Watt
Dielectric Strength	1 minute at 300 Vac
Slider Noise	≤ 47 mV
Insulation Resistance	≥ 100 MΩ at 250 Vdc
Residual Resistance	R1,2— ≤ 5 Ω R2,3 — ≤ 5 Ω
Element Count	Single/Dual
Tracking Error	-40 dB—0 dB $\leq \pm 3$ dB

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
Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 1

Document #: _____

Fader Characteristics

T_A = 25°C unless otherwise noted

Slide Travel	45mm, 60mm, 100mm
Operating Force	5—120 gf.cm
Stopper Strength	5 Kgf.cm for 5 seconds
Lever Wobble	1.6mm p-p maximum
Operational Life	300,000 cycles minimum
Total Resistance Shift	±15%
Touch Sense Track	NO
Lever Deviation	0.5mm max (one side)

Environmental Characteristics

T_A = 25°C unless otherwise noted

Operating Temperature Range	-10°C -70°C
IP Rating	N/A
Soldering Condition	260°C for 3 seconds
RoHS	Please refer to TT Electronics website
REACH	Please refer to TT Electronics website

Ordering Info

PSL2	100	N	2	T	02	05B	103
------	-----	---	---	---	----	-----	-----

Part Family

Travel (mm)

045/060/100

Motor Option

N - N/A

Track Count

1 - Single Track

2 - Dual Track

Terminal Type

T - PC Pins

Lever Height

See Lever Table

Resistance Taper

See Resistance Taper Table

Resistance Code

See Resistance Chart

Lever Table		
Order Code	L(F)(H) (mm)	Lever Style
01	20(10)	A
02 03	15(10)(3.8) 21(9)(3.8)	B
04 05 06	8 11.5 14	C
07 08 09	10 15 20	D

Resistance Taper Table (Code)		
Taper "A"	Taper "B"	Taper "C"
05A	00B	05C
10A	01B	10C
15A	02B	15C
20A	03B	20C
25A	04B	25C
30A	05B	30C

Code	Resistance
102	1K
202	2K
502	5K
103	10K
203	20K
503	50K
104	100K
204	200K
504	500K

General Note

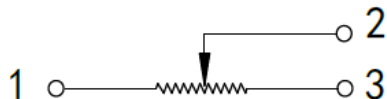
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Outline Drawings

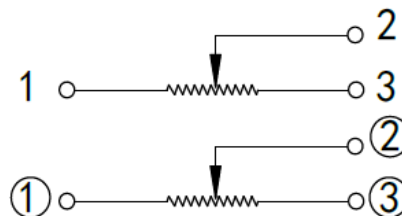
Lever Table				
Lever Style				
Order Code -L(F)(H) Units: mm	01 - 20(10)	02 - 15(10)(3.8) 03 - 20(10)(3.8)	04 - 8 05 - 11.5 06 - 14	07 - 10 08 - 15 09 - 20

PSL2 Series Circuit Diagram

1 Track



2 Track

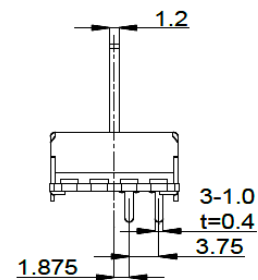
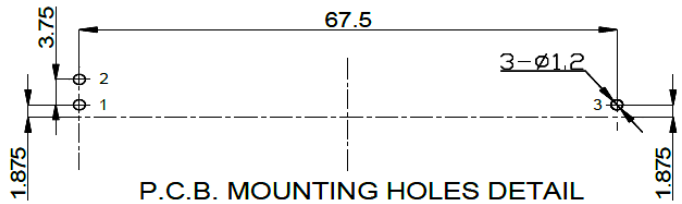
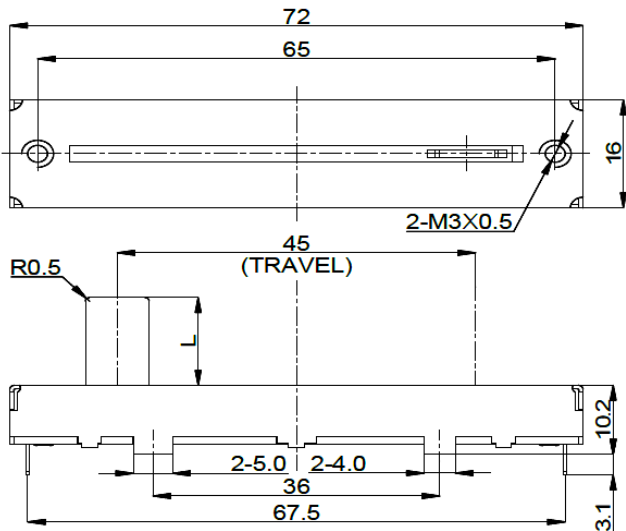


Slide Potentiometer

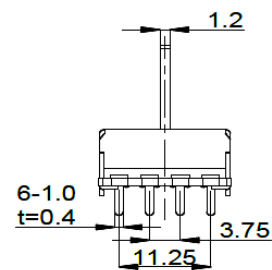
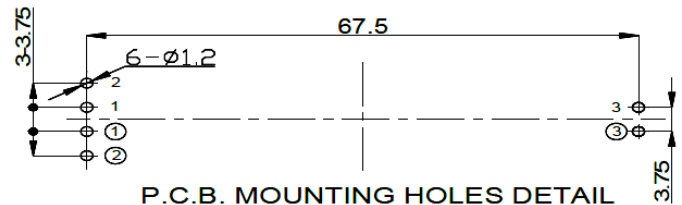
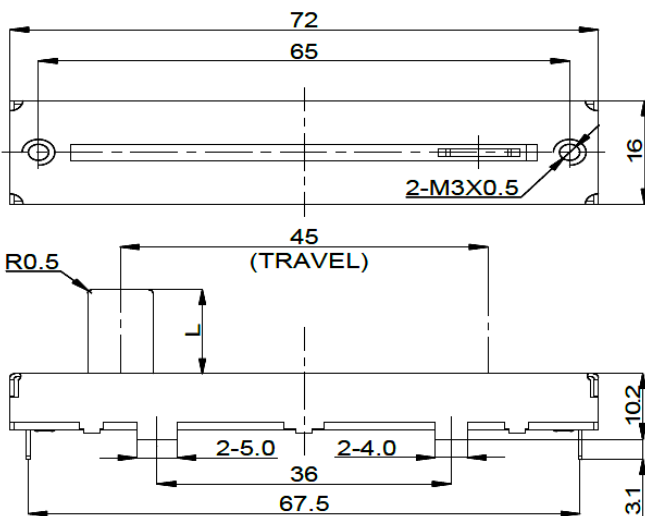
PSL2



45mm Travel—Single Track



45mm Travel—Dual Track



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
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 5

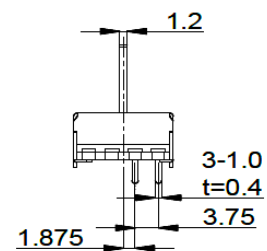
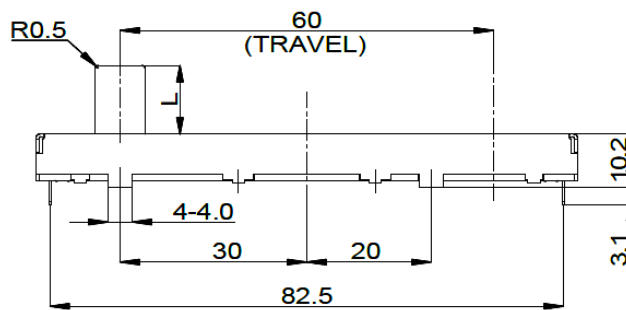
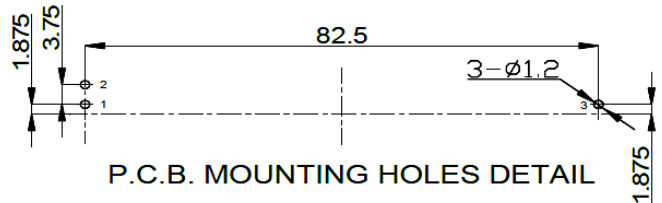
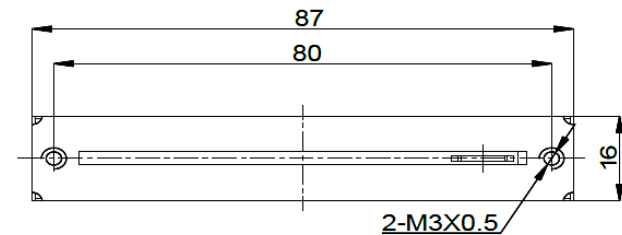
Document #: _____

Slide Potentiometer

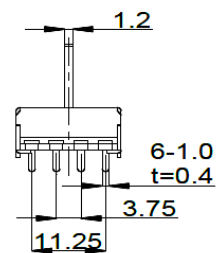
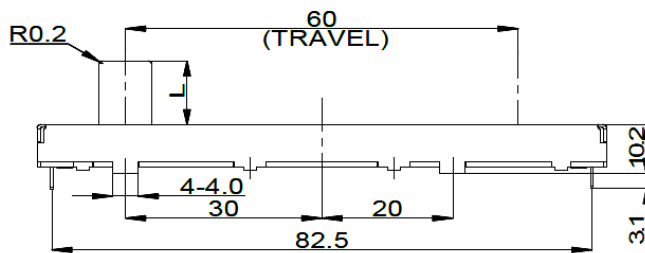
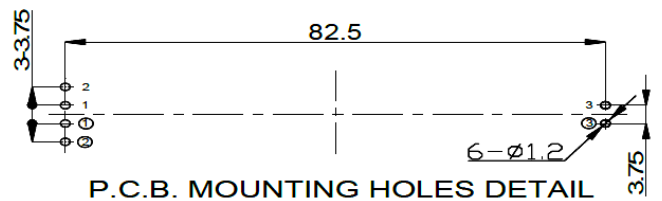
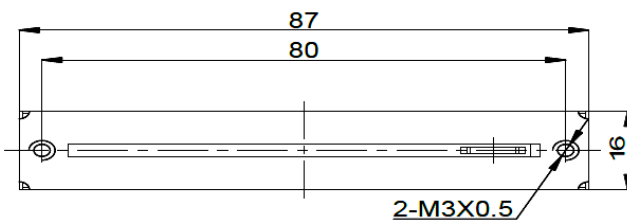
PSL2



60mm Travel—Single Track



60mm Travel—Dual Track



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
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 6

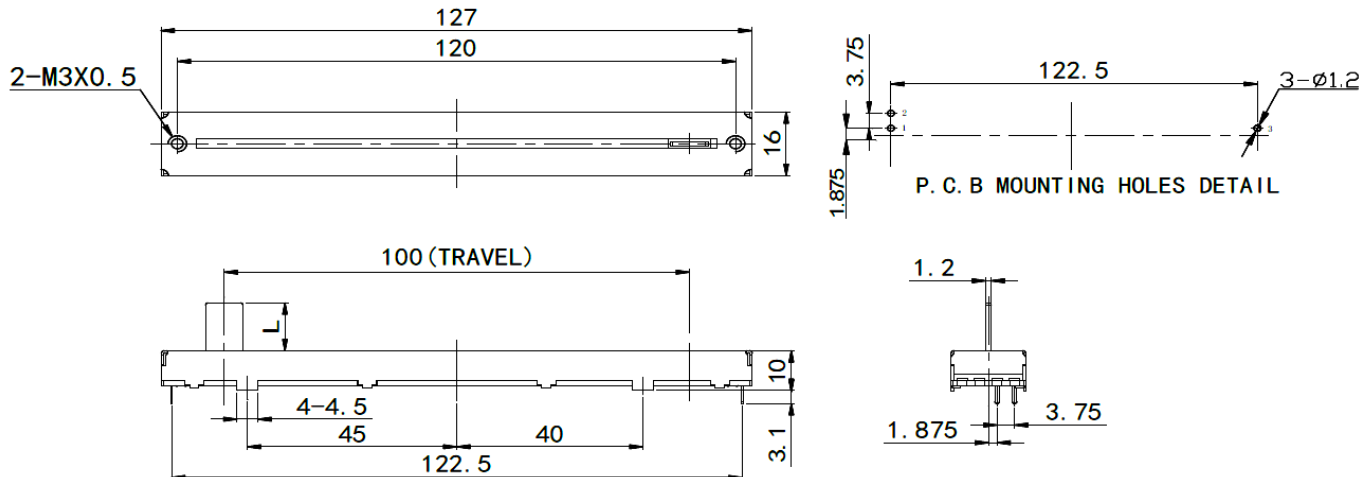
Document #: _____

Slide Potentiometer

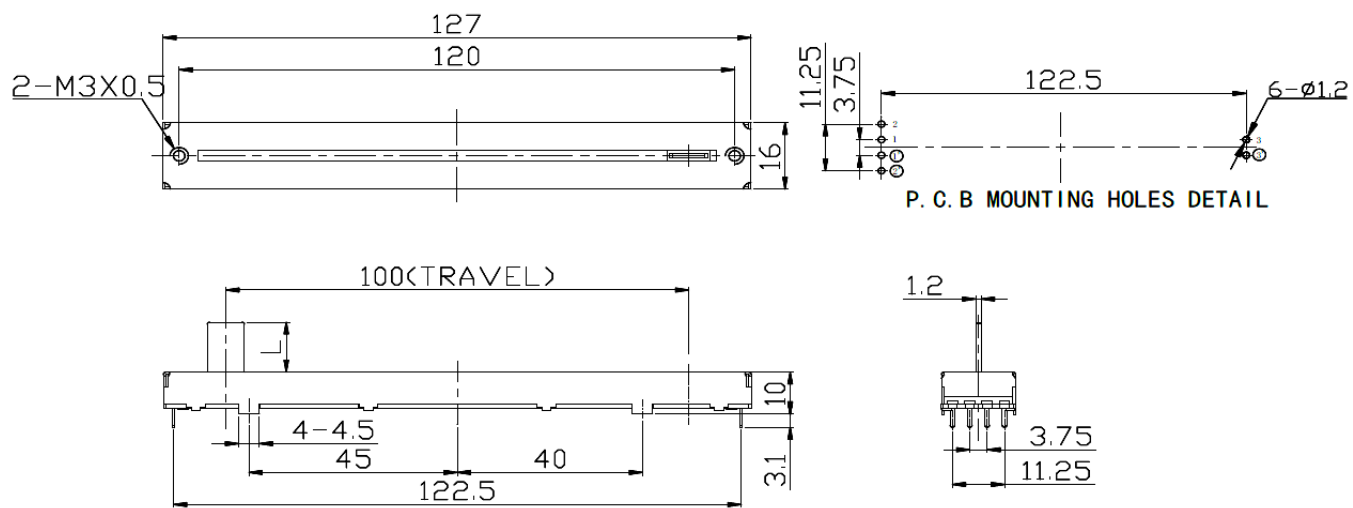
PSL2



100mm Travel—Single Track



100mm Travel—Dual Track



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

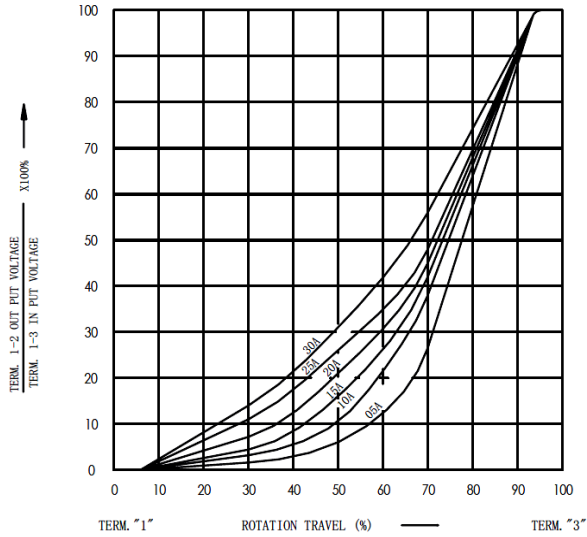
TT Electronics | BI Technologies
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies

Rev - 06/2019 Page 7

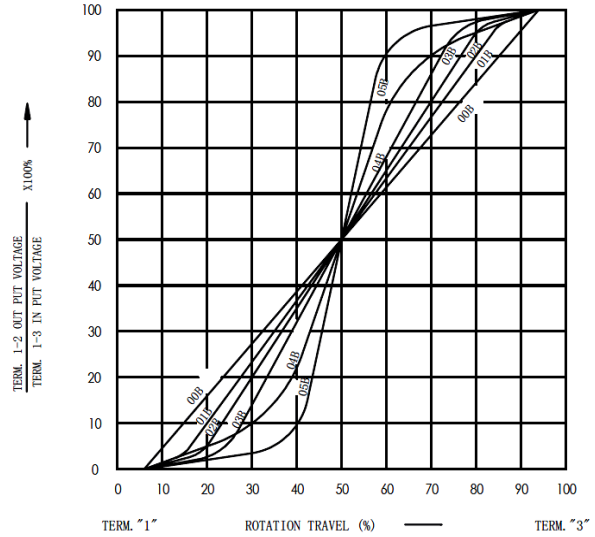
Document #: _____

Standard Tapers

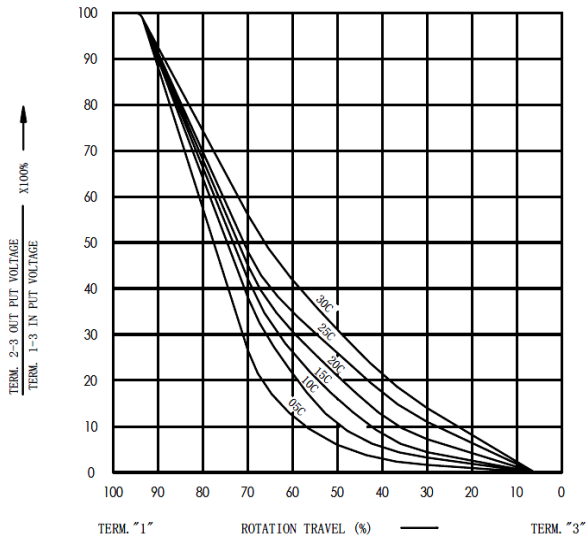
TAPERS (A) SERIES



TAPERS (B) SERIES



TAPERS (C) SERIES



Resistance Taper Table (Code)		
Taper "A"	Taper "B"	Taper "C"
05A	00B	05C
10A	01B	10C
15A	02B	15C
20A	03B	20C
25A	04B	25C
30A	05B	30C

Packaging

Standard Packaging	N/A
Included Hardware	None

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 | BI Technologies
 Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
 Ph: + 1 (714) 447-2345
www.ttelectronics.com/bi-technologies