

Model P160 Series



16 mm Panel Potentiometer

Features:

- Conductive Plastic Element
- 100,000 Cycle Life
- Metal Bushing/Shaft
- Single or Dual Gang
- Rotary Switch Option



All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU)2015/863

Applications:

- Electric Guitars
- Audio Amplifiers and Mixers
- Drum Machines
- Synthesizers

Model Styles Available

P160KN	Side Adjust, PC Pins
P160KN2	Side Adjust, Long PC Pins
P160KNP	Side Adjust, Solder Lugs
P160KNPD	Rear Adjust, PC Pins
P160KS	Side Adjust, Rotary Switch, PC Pins
P160KG	Side Adjust, Dual Gang, PC Pins

Electrical

Resistance Range	500 Ω – 1M Ω
Resistance Tolerance	$\pm 20\%$ 500 Ω & 1M Ω : $\pm 30\%$
Resistance Tapers ¹	A, B, C, D
Maximum Operating Voltage	Linear Taper: 200 VAC Other Tapers: 150 VAC
Rated Power	Linear Taper: 0.2W Other Tapers: 0.1W
Rotational Noise	< 100mV
Insulation Resistance	> 100M Ω at 500 VDC
Dielectric Withstand Strength	1 minute at 500 VAC
Residual Resistance	< 20 Ω
Nominal Electrical Travel	260°
Gang Error (Dual Unit)	$\pm 3\text{dB}$ (-40dB to 0db)
Switch Circuit	SPST
Switch Power Rating	1A at 12 V AC/DC
Switch Contact Resistance	< 50 m Ω

¹See Tapers Section

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

Rotation	300° ±10°
Rotational Torque	20 gf.cm – 100 gf.cm
Static Stop Strength	7.0Kgf.cm minimum
Push-Pull Strength	8.0Kgf minimum
Detents	0, Center, 11, 21, or 41
Detent Torque	100 - 300 gf.cm
Switch Rotational Angle	35° ±10°
Switch Torque	70 – 250 gf.cm
Nut Tightening Force	8.0Kgf.cm minimum

Environmental

Operating temperature range	-10°C to +70°C
Rotational Life	100,000 cycles minimum
Switch Life	15,000 cycles minimum
Ingress protection rating (IP code)	IP40
Soldering Condition	Wave Soldering: 260°C maximum for 1-3 seconds Hand Soldering: 350°C maximum for 3 seconds

Ordering Information

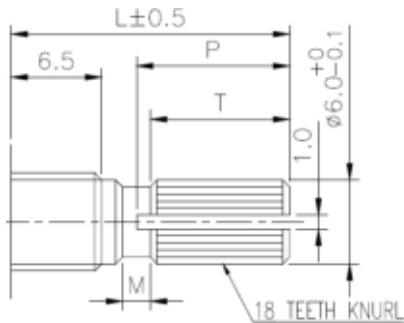
	P160	KN	-	0	Q	C	20	B	100K
Part Family									
Style									
KN = Side Adjust, PC Pins KN2 = Side Adjust, Long PC Pins KNP = Side Adjust, Solder Lugs KNPD = Rear Adjust, PC Pins KS = Side Adjust, Rotary Switch, PC Pins KG = Side Adjust, Dual Gang, PC Pins									
Detent									
0 = No Detents 1 = Center Detent 2 = 11 Detents 3 = 21 Detents 4 = 41 Detents									
Shaft Type									
E = Slotted Shaft F = Flatted Shaft P = Plain Shaft Q = Knurled Shaft									
Full CCW Shaft Position									
See Full CCW Positions Section									
Shaft Length									
See Shaft Type and Lengths Section									
Tapers									
A = Audio (15A) B = Linear (Single Unit: 1B) (Dual Unit: 3B) C = Reverse Audio (15C) D = Audio (10A)									
Total Resistance									
See Below									

Standard Resistance Values, Ohms

500 1K 2K 5K 10K 20K 50K 100K 200K 500K 1MEG

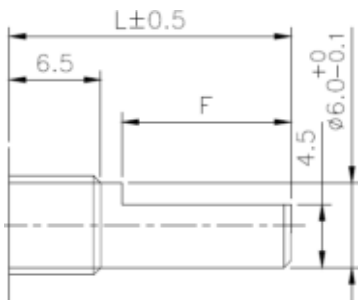
Shaft Types and Lengths

Q - Knurled



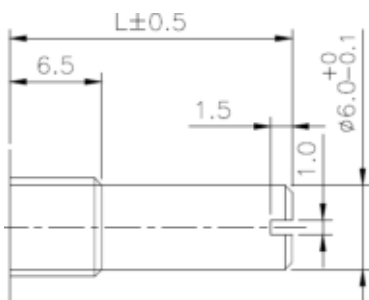
L	10	13	15	17	20	25	30	35
P	2.5	5	7	9	12	14	14	14
T	2.5	4	6	8	10	12	12	12
M	1	1	1	1	2	2	4	4

F - Flatted



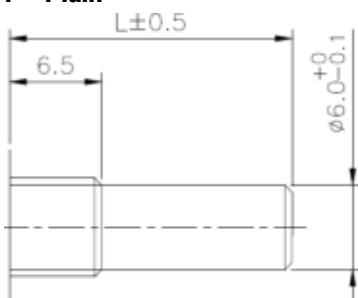
L	15	18	20	25	30	35
F	7	10	12	12	12	12

E - Slotted



L	10	15	20	25	30	35
---	----	----	----	----	----	----

P - Plain



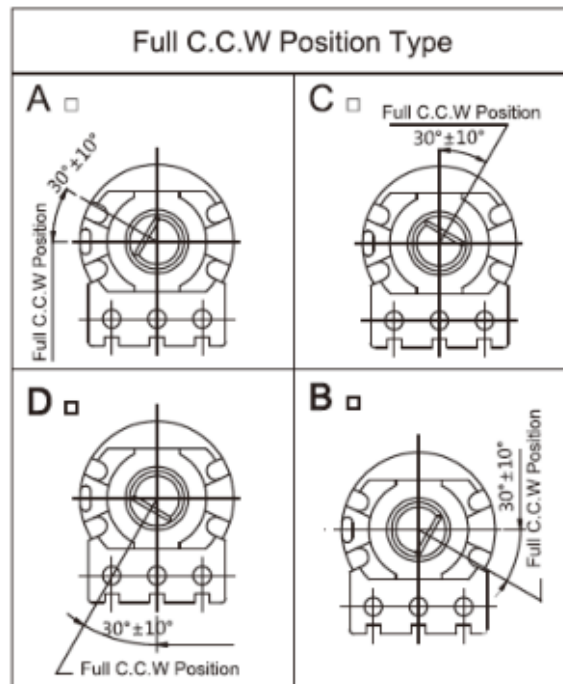
L	15	20	25	30	35
---	----	----	----	----	----

General Note

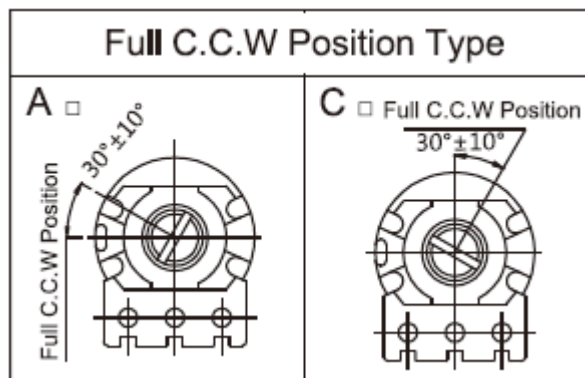
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Full CCW Positions

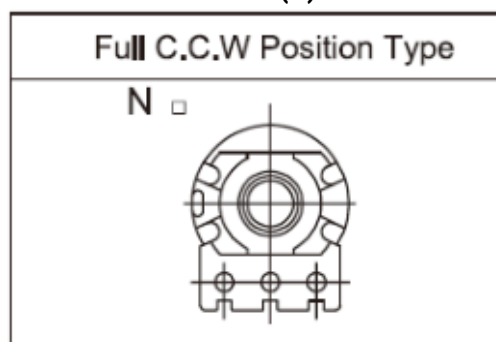
Flatted (F)



Knurled (Q) and Slotted (E)



Plain (P)

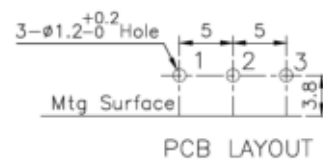
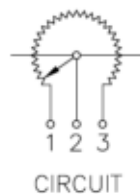
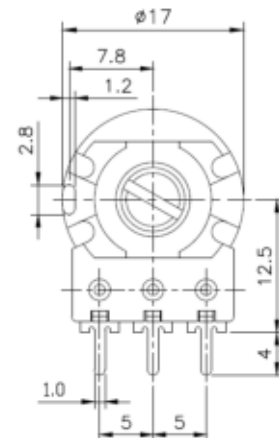
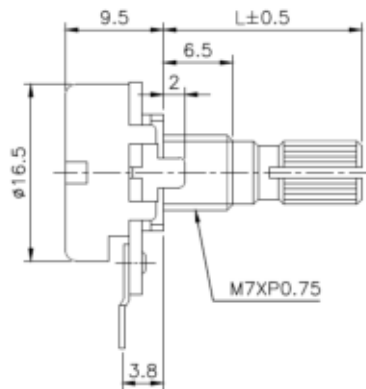
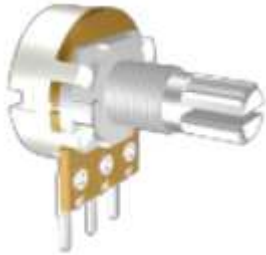


Model P160 Series

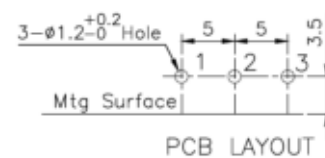
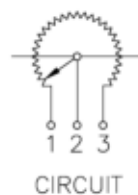
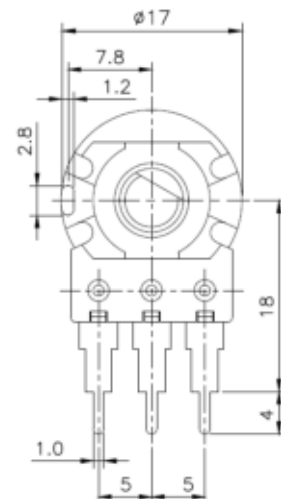
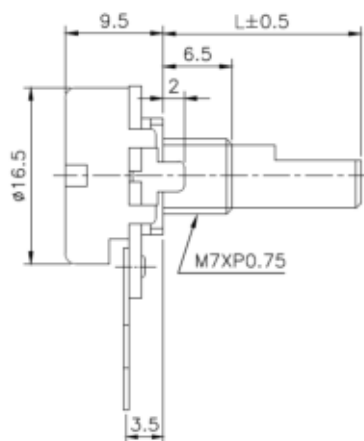
16 mm Panel Potentiometer

Outline Drawing

KN – Side Adjust, PC Pins



KN2 – Side Adjust, Long PC Pins



General Note

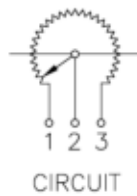
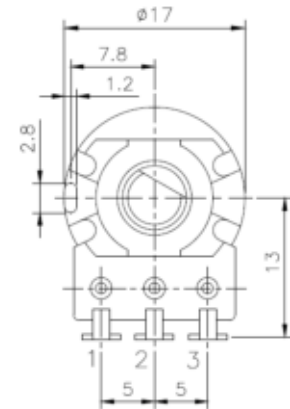
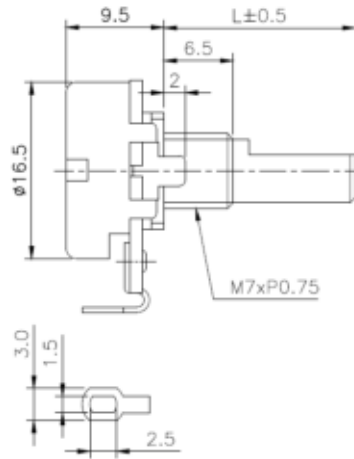
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Model P160 Series

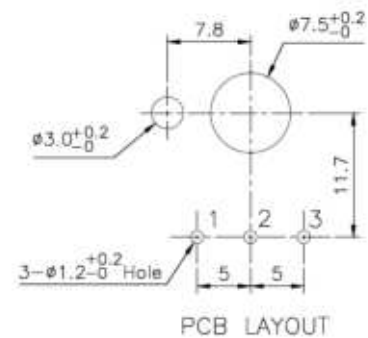
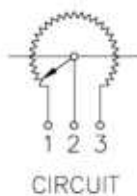
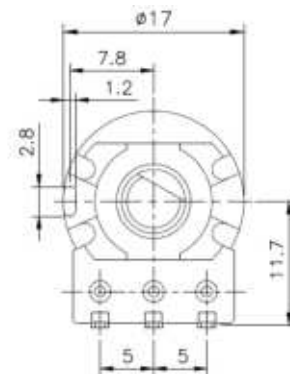
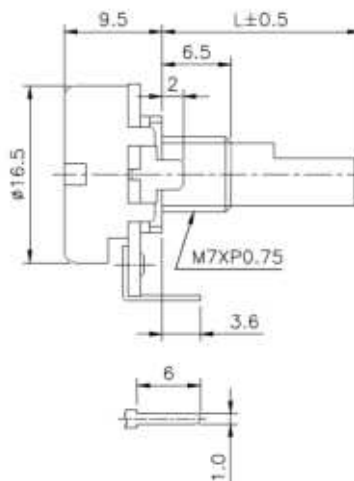
16 mm Panel Potentiometer

Outline Drawing

KNP – Side Adjust, Solder Lugs



KNPD – Rear Adjust, PC Pins



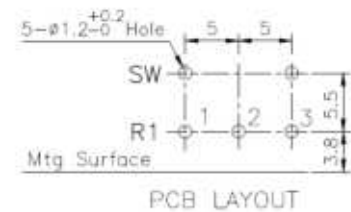
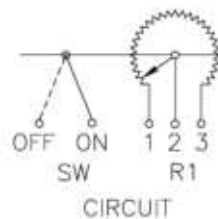
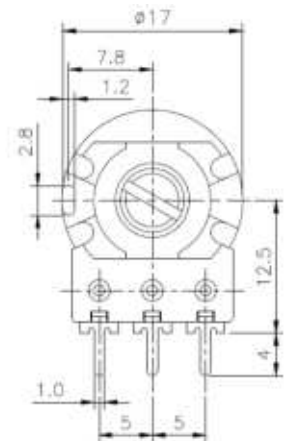
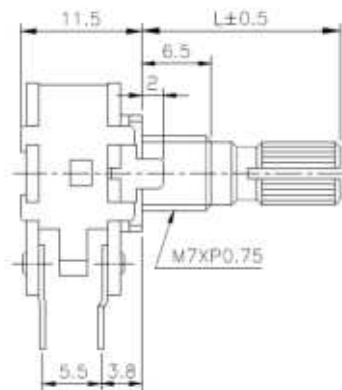
General Note

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.

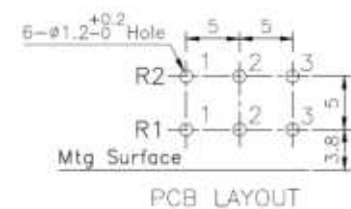
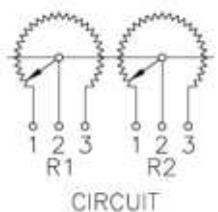
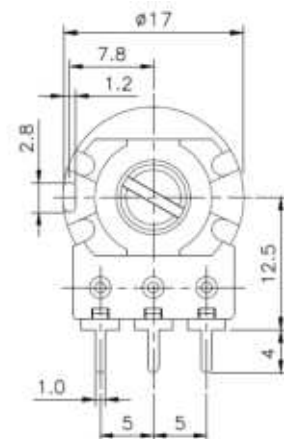
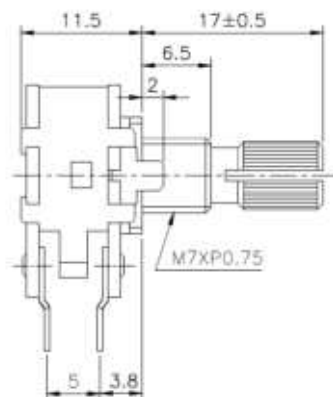
16 mm Panel Potentiometer

Outline Drawing

KS – Side Adjust, Rotary Switch, PC Pins



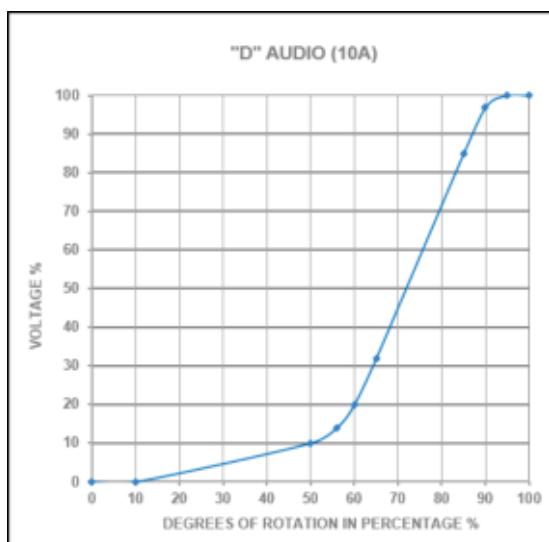
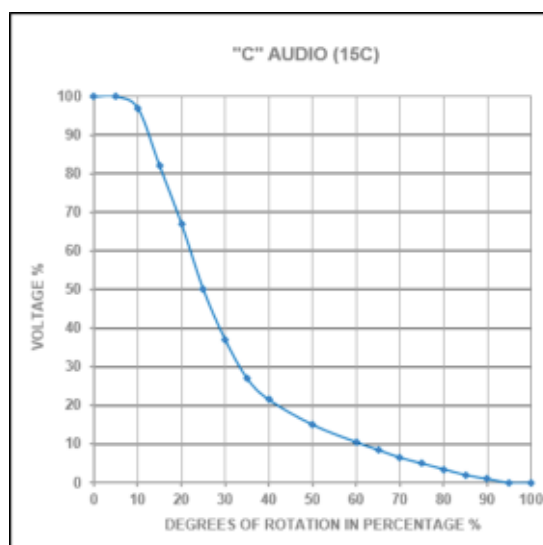
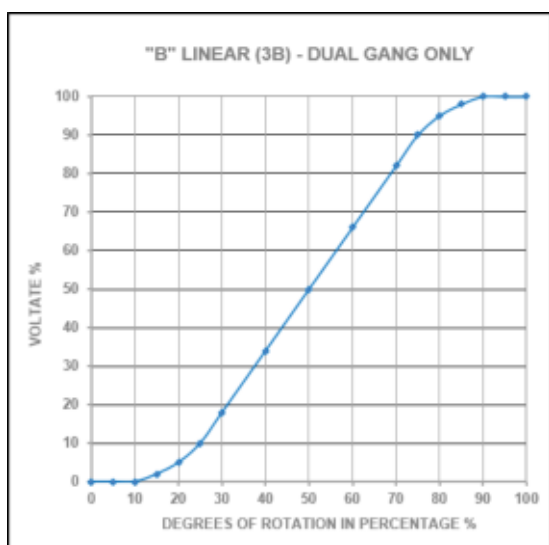
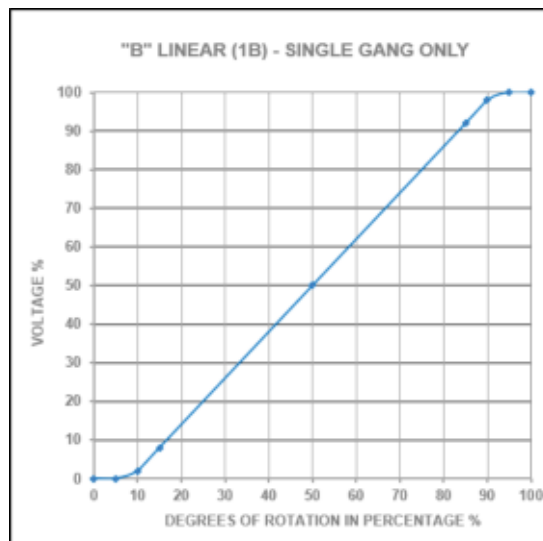
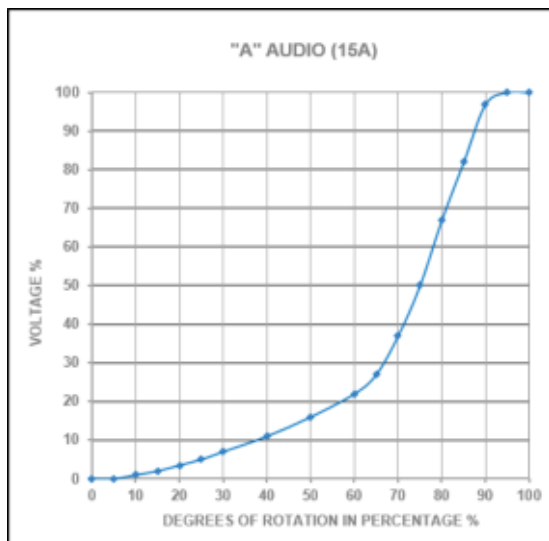
KG – Side Adjust, Dual Gang, PC Pins



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.

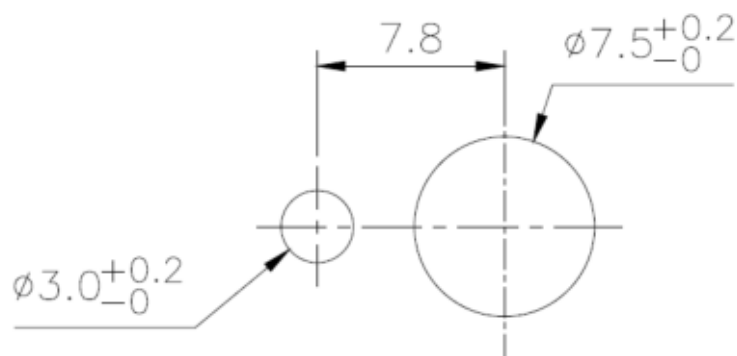
Tapers



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.

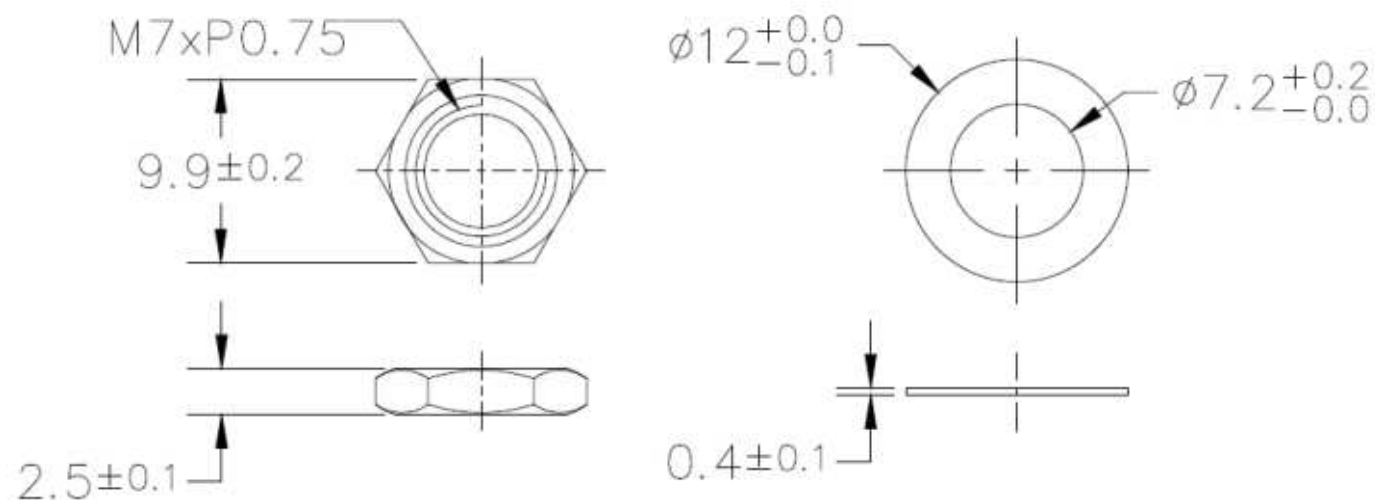
Panel Layout



Packaging

Standard Packaging	Plastic Trays
Included Hardware	Hex Nut and Flat Washer

Hardware



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.