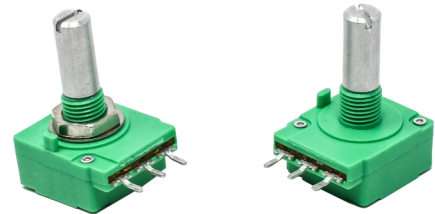


# 17 mm Rotary Potentiometer

## P166 Series

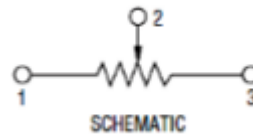


### Features:

- Resistance range 1 KΩ to 1 MEGΩ
- Conductive plastic element
- 15,000 cycle life
- Metal shaft
- Plastic Bushing & Housing

### Description:

17 mm rotary potentiometer with plastic housing and bushing to providing IP 50 rating. Options include knurled, flatted, slotted, or plain metal shaft types.



### Applications:

- Amplifiers/mixers/synthesizers
- Appliances
- Audio/Car Radio/TV sets
- Industrial Controls

## Electrical Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Resistance Range	1KΩ to 1MΩ
Standard Resistance Tolerance	±20%
Residual Resistance	20Ω max.
Maximum Operating Voltage	Linear Taper B: 200 VAC Other Tapers: 150 VAC
Rated Power	Linear Taper B: 0.2W Other Tapers: 0.1W
Dielectric Strength	1 minute at 500 VAC
Insulation Resistance	100MΩ min. at 500 VDC
Rotational Noise	100 mV max.

#### 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.

# 17 mm Rotary Potentiometer

## P166 Series



### Mechanical Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Total Rotational Travel	300° ±10°
Rotational Torque	20 - 100 gf.cm
Rotational Stop Strength	7 kgf.cm min.
Dentent Torque	100 - 300 gf.cm
Nut Tightening Strength	8 kgf.cm min.
Rotational Life	15,000 cycles

### Environmental Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Operating Temperature	-10°C to +70°C
IP Rating	IP 50
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

### Packaging Information

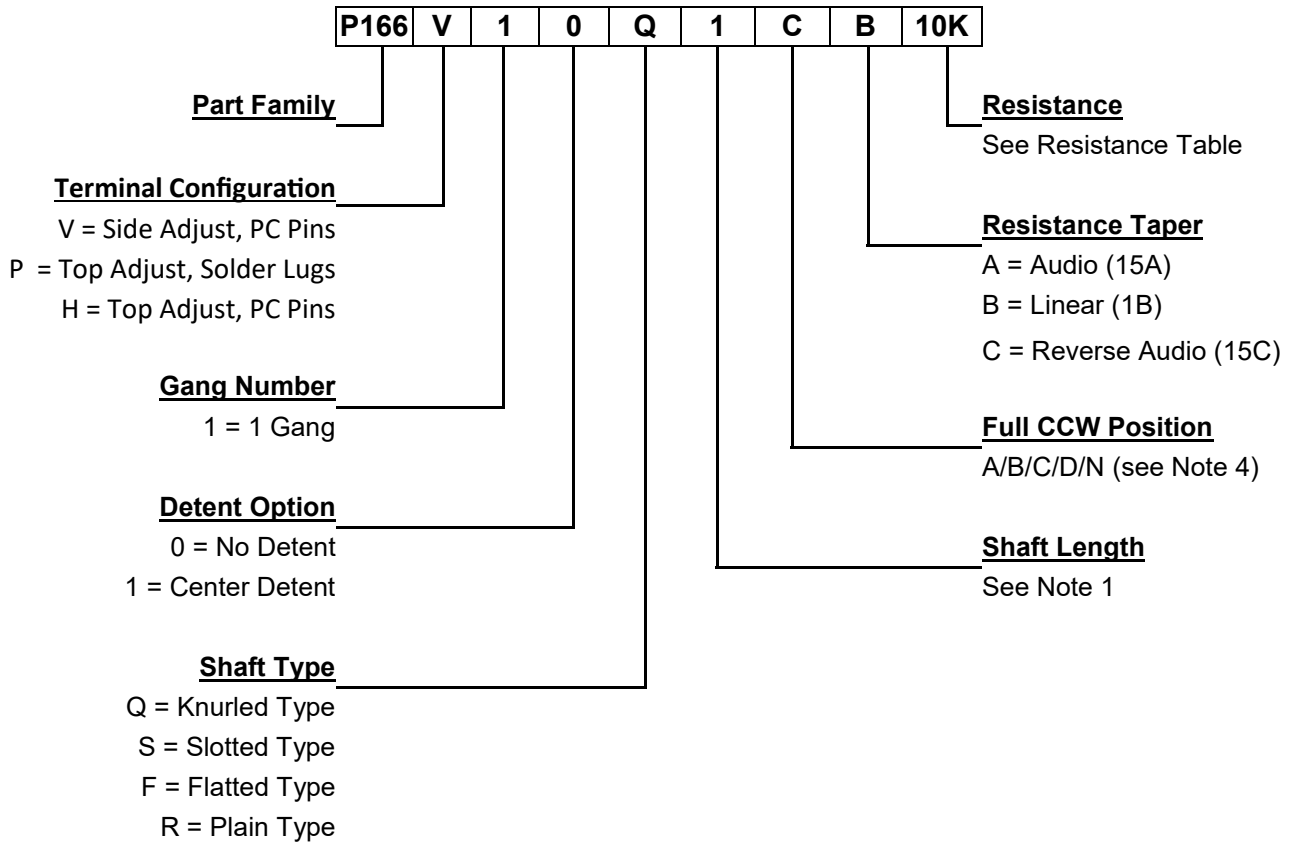
Standard Packaging	Plastic Trays
Hardware	Flat washer and mounting nut

# 17 mm Rotary Potentiometer

## P166 Series



### Ordering Information



Resistance Table										
Resistance (Ohms)	1,000	2,000	5,000	10,000	20,000	50,000	100,000	200,000	500,000	1,000,000
Code	1K	2K	5K	10K	20K	50K	100K	200K	500K	1MEG

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  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: + 1 (714) 447-2345  
 www.ttelectronics.com

# 17 mm Rotary Potentiometer

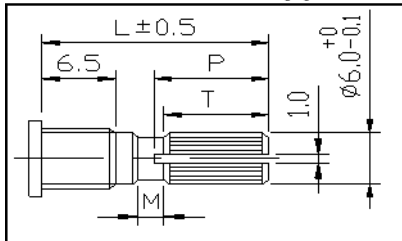
## P166 Series



### Outline Drawings

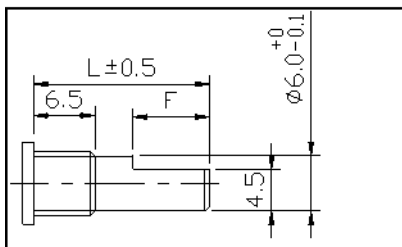
#### Note 1: Shaft Style & Length

#### Q-Type



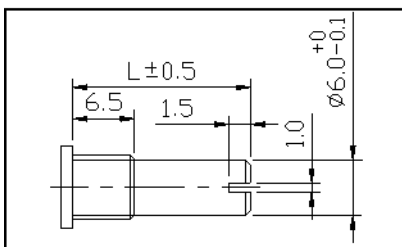
Code	1	2	3	4	5	6
L	10	15	20	25	30	35
P	2.5	7	12	14	14	14
T	2.5	6	10	12	12	12
M	1	1	2	2	4	4

#### F-Type



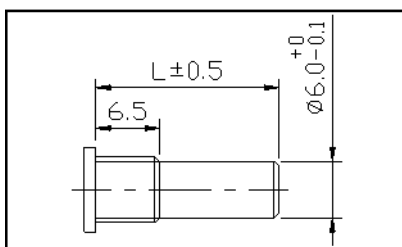
Code	1	2	3	4	5	6
L	10	15	20	25	30	35
F	2	7	12	12	12	12

#### S-Type



Code	1	2	3	4	5	6
L	10	15	20	25	30	35

#### R-Type



Code	2	3	4	5	6
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.

© TT electronics plc

TT Electronics | BI Technologies  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: +1 (714) 447-2345  
 www.ttelectronics.com

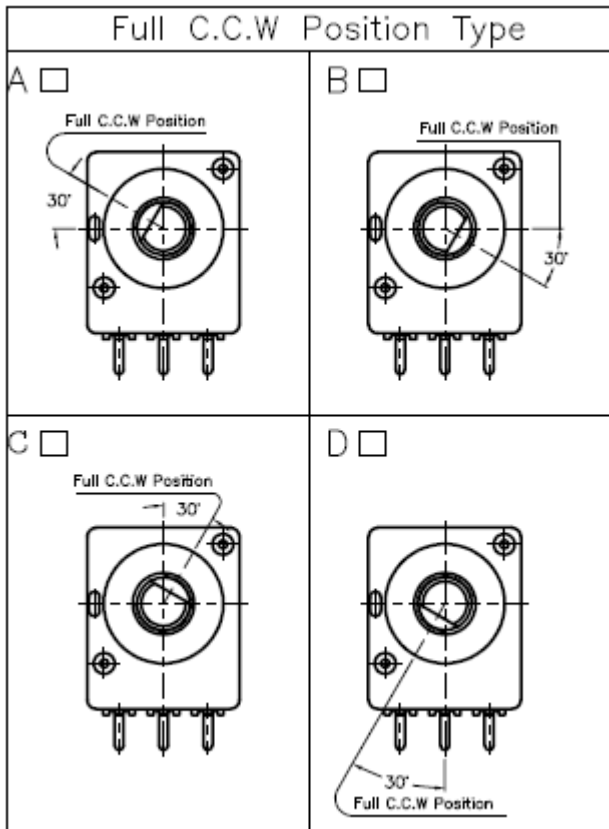
# 17 mm Rotary Potentiometer

## P166 Series

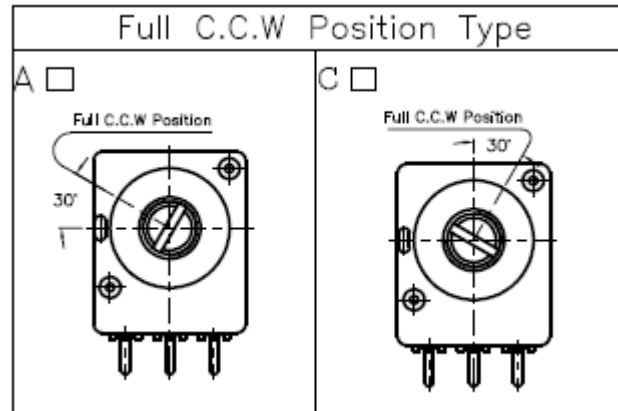


### Note 2: Full CCW Position

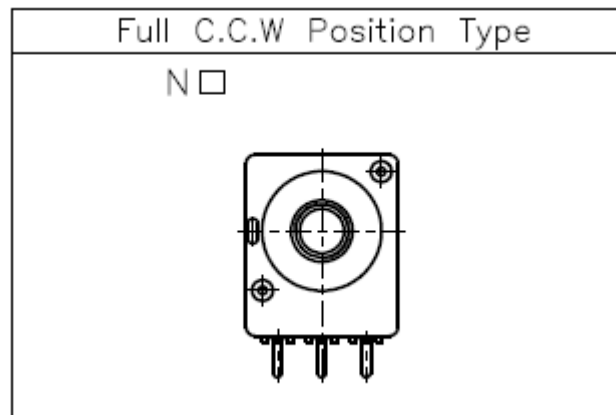
#### F-Type



#### Q/S-Type



#### R-Type

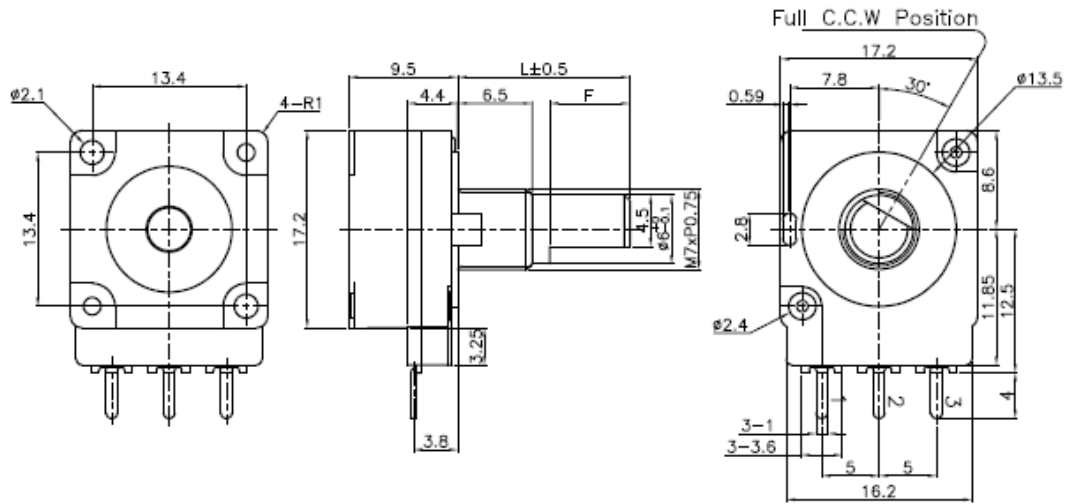


# 17 mm Rotary Potentiometer

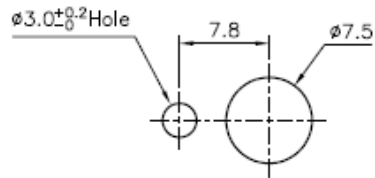
## P166 Series



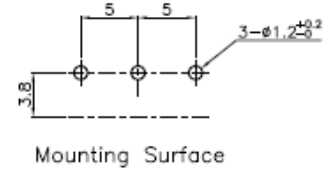
### V - Side Adjust, PC Pins



Panel Mounting Hole Detail



P.C.B Mounting Hole Detail



Mounting Surface

#### 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

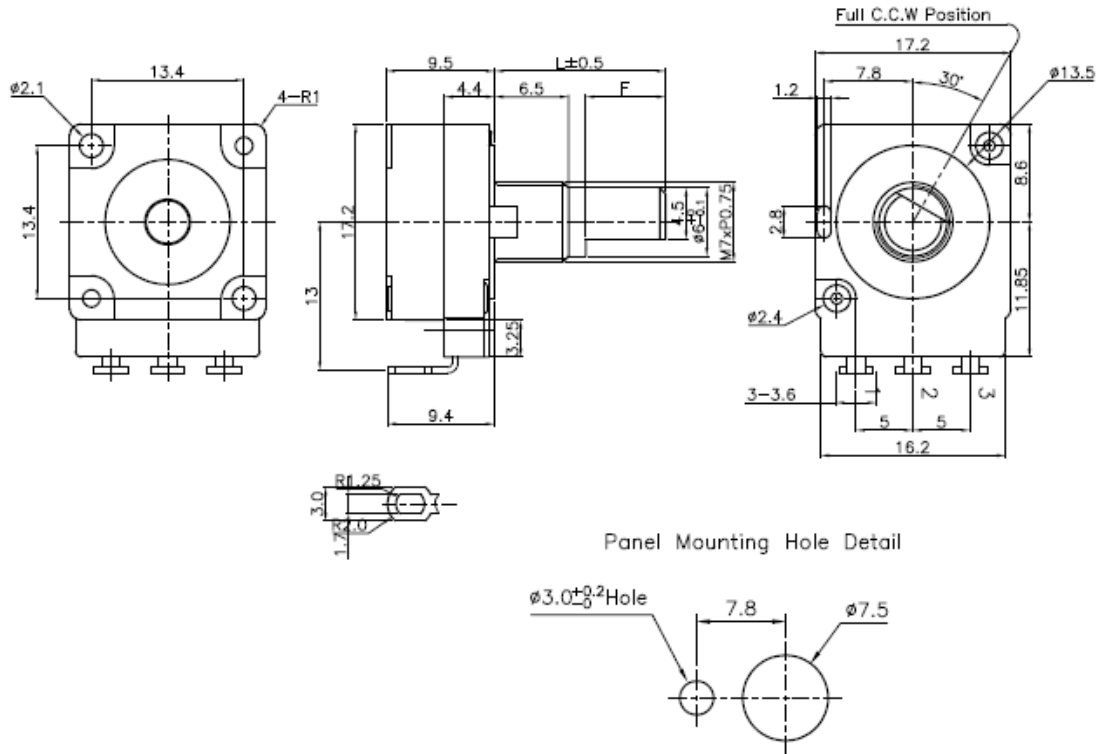
TT Electronics | BI Technologies  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: +1 (714) 447-2345  
 www.ttelectronics.com

# 17 mm Rotary Potentiometer

## P166 Series



### P - Top Adjust, Solder Lugs



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  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: +1 (714) 447-2345  
 www.ttelectronics.com

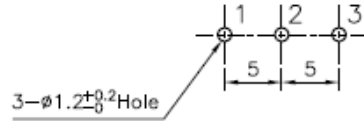
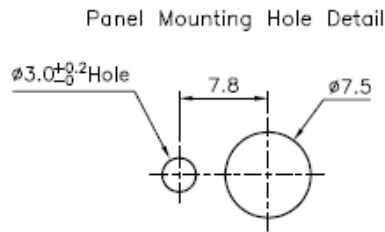
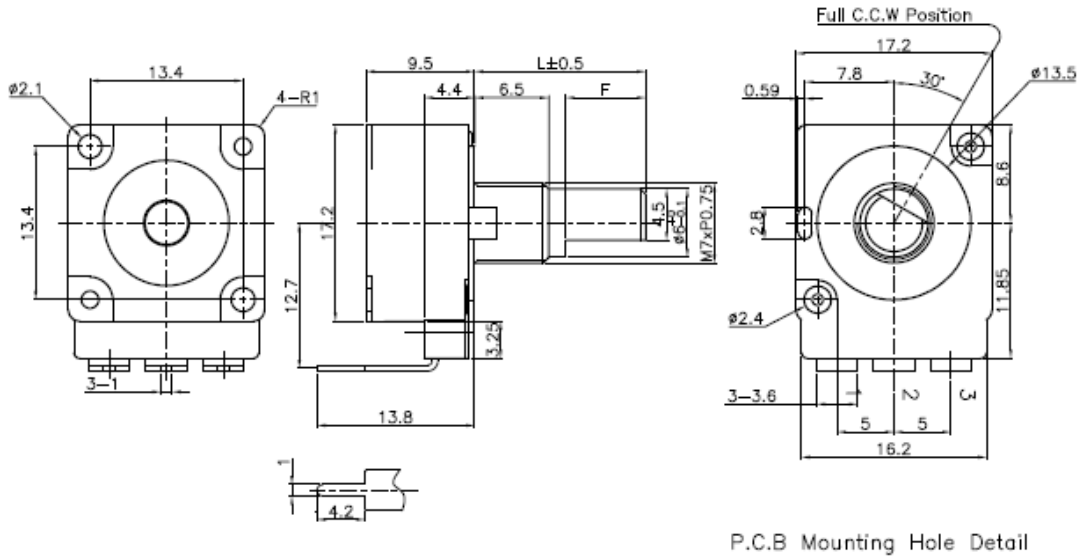
Rev - 04/2021 Page 7

# 17 mm Rotary Potentiometer

## P166 Series



### H - Top 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.

© TT electronics plc

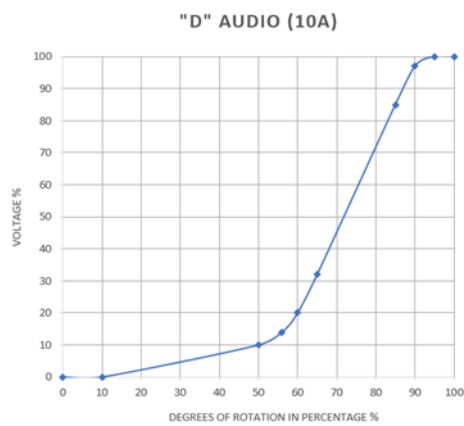
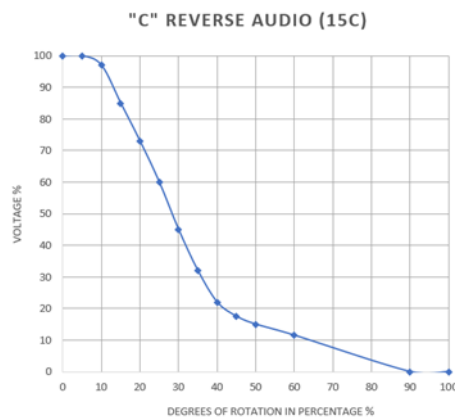
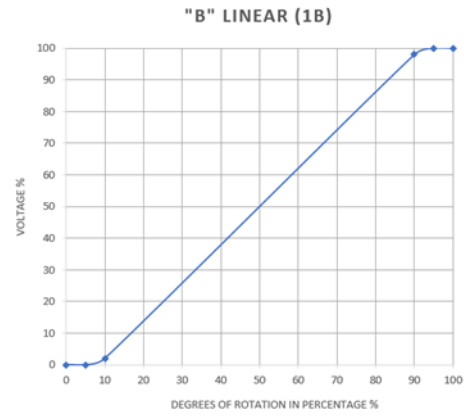
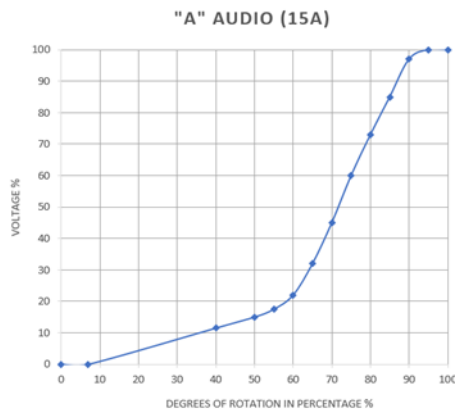
TT Electronics | BI Technologies  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: +1 (714) 447-2345  
 www.ttelectronics.com

# 17 mm Rotary Potentiometer

## P166 Series



### Standard 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.

© TT electronics plc

TT Electronics | BI Technologies  
 413 Rood RD, Suite 7  
 Calexico, CA 92231  
 Ph: + 1 (714) 447-2345  
 www.ttelectronics.com