



## SERIES: PTN15 | DESCRIPTION: ROTARY POTENTIOMETER

### FEATURES

- 15mm
- carbon element
- dust proof enclosure
- multiple rotor options
- linear, logarithmic, and reverse logarithmic tapers



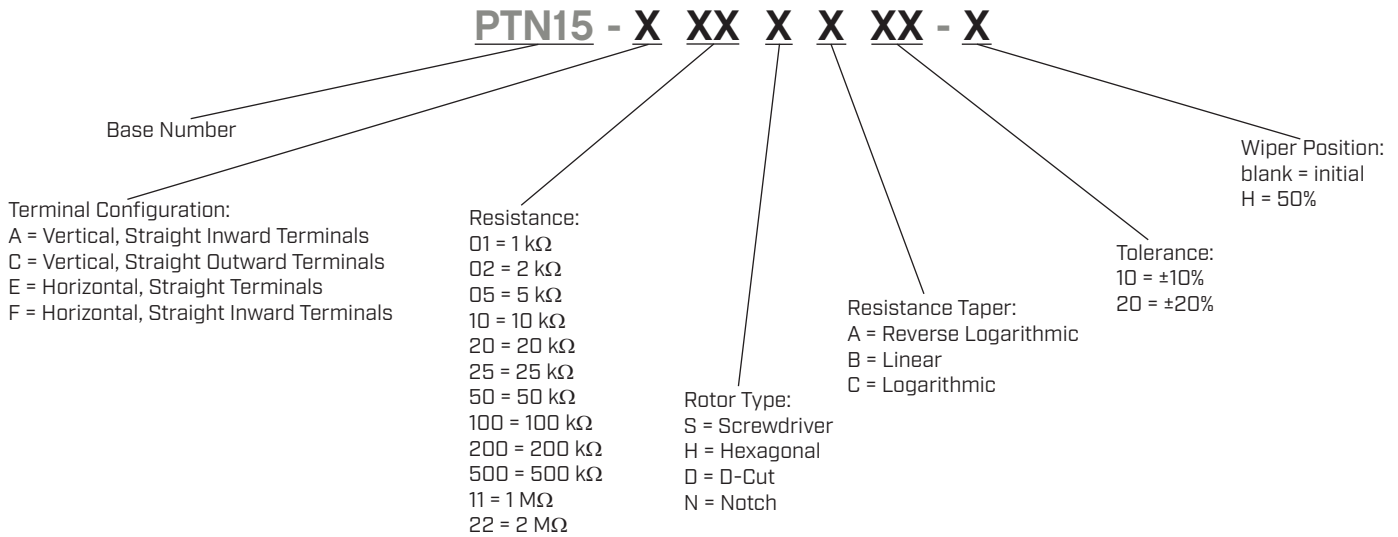
### SPECIFICATIONS

| parameter                     | conditions/description                       | min | typ | max   | units |
|-------------------------------|--|-----|-----|-------|-------|
| maximum operating voltage     |  |     |     | 300   | Vdc   |
| power rating                  | at 70°C                                      |     |     | 0.2   | W     |
| taper                         | linear, logarithmic, and reverse logarithmic |     |     |       |       |
| standard resistance range     | see Resistance Table                         | 1.0 |     | 2,000 | kΩ    |
| standard resistance tolerance | ±10% or ±20%, see Part Number Key            |     |     |       |       |
| residual resistance           |  |     |     | 10    | Ω     |
| sliding noise                 |  |     |     | 68    | mV    |
| operating temperature         |  | -10 |     | 70    | °C    |
| hand soldering                | for 3 seconds max                            |     |     | 350   | °C    |
| wave soldering                | for 5±1 seconds                              | 255 | 260 | 265   | °C    |
| RoHS                          | yes  |     |     |       |       |

### MECHANICAL

| parameter         | conditions/description | min   | typ  | max    | units  |
|-------------------|------------------------|-------|------|--------|--------|
| mechanical angle  |                        | 255   | 265  | 275    | °      |
| rotational torque |                        | 10    |      | 80     | gf-cm  |
| stop strength     |                        | 1,000 |      |        | gf-cm  |
| rotational life   |                        |       |      | 10,000 | cycles |
| weight            |                        | 1.29  | 1.32 | 1.35   | g      |

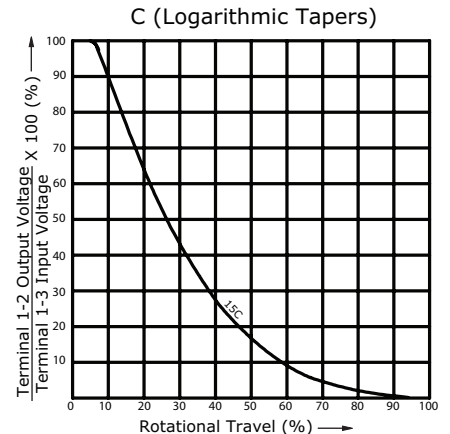
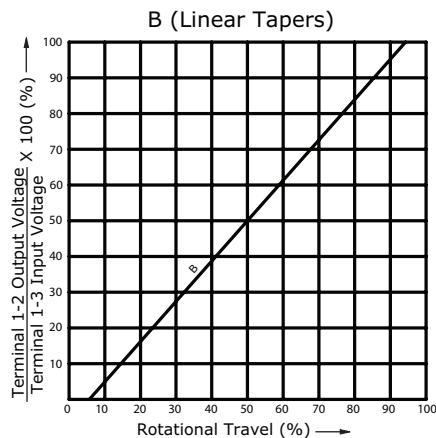
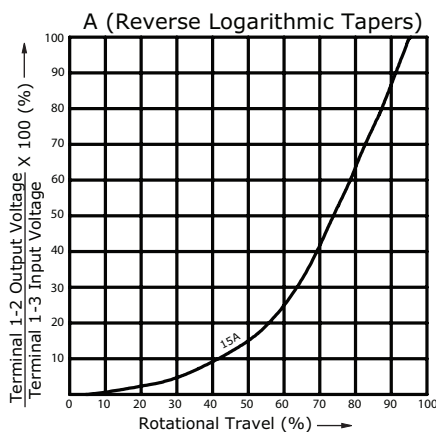
## PART NUMBER KEY



## SCHEMATIC/TAPERS



| Resistance Table |      |
|------------------|------|
| Resistance [KΩ]  | Code |
| 1                | 01   |
| 2                | 02   |
| 5                | 05   |
| 10               | 10   |
| 20               | 20   |
| 25               | 25   |
| 50               | 50   |
| 100              | 100  |
| 200              | 200  |
| 500              | 500  |
| 1,000            | 11   |
| 2,000            | 22   |



## ROTOR TYPE

units: mm  
tolerance:  $\pm 0.3$  mm  
unless otherwise noted

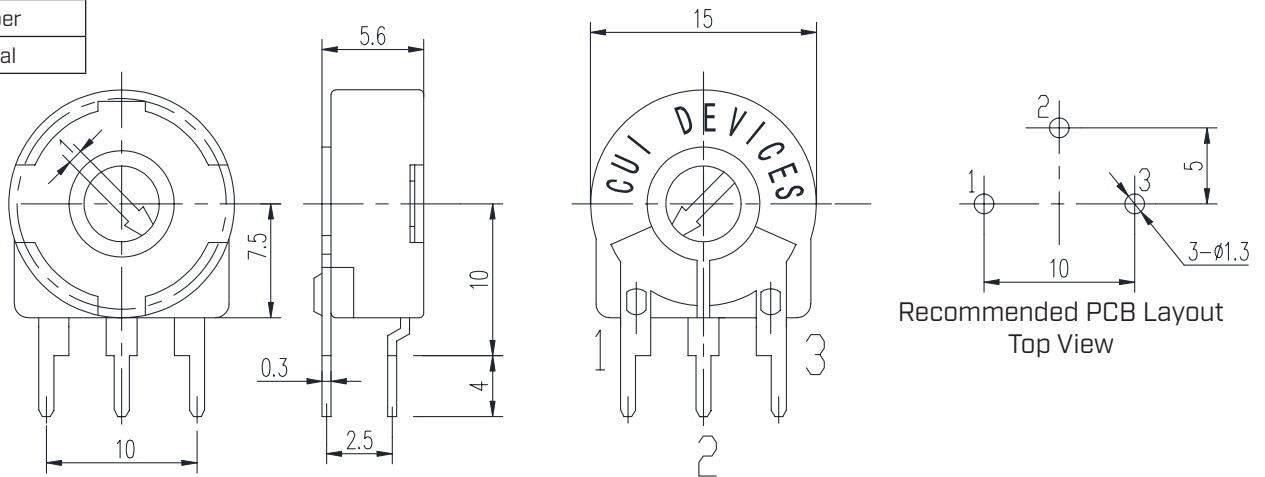


## MECHANICAL DRAWING (VERTICAL, STRAIGHT INWARD TERMINALS)

units: mm  
tolerance:  
 $X \leq 10$ :  $\pm 0.3$  mm  
 $10 < X \leq 30$ :  $\pm 0.5$  mm  
 $30 < X \leq 100$ :  $\pm 1.0$  mm  
unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL     | PLATING/COLOR |
|------|-------------|--------------|---------------|
| A    | housing     | PA6 (UL94HB) | black         |
| B    | terminals   | steel        | tin           |
| C    | reed        | tin bronze   |               |

| TERMINAL CONNECTIONS |             |
|----------------------|-------------|
| TERMINAL             | DESCRIPTION |
| 1                    | Initial     |
| 2                    | Wiper       |
| 3                    | Final       |

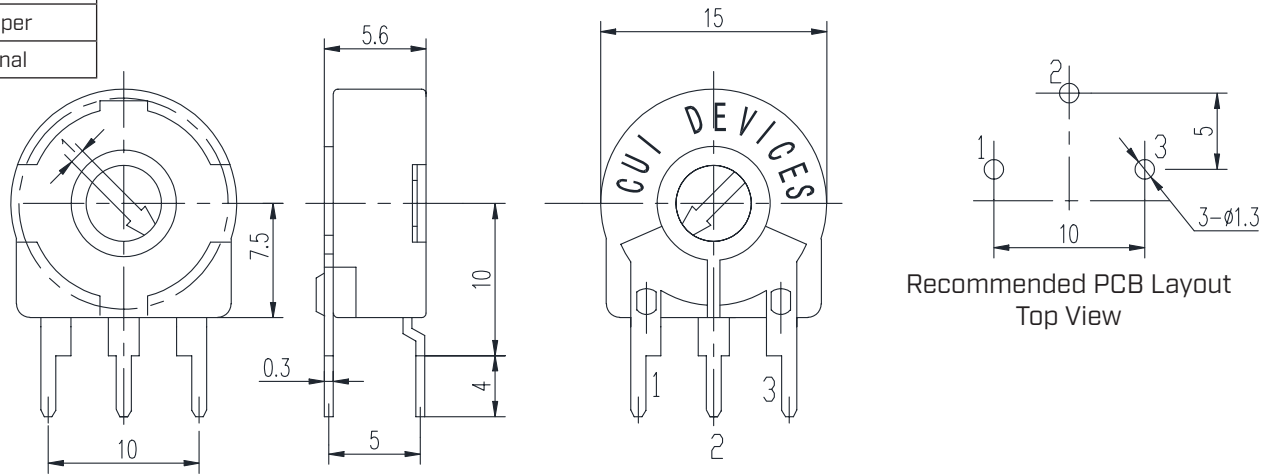


## MECHANICAL DRAWING (VERTICAL, STRAIGHT OUTWARD TERMINALS)

units: mm  
 tolerance:  
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 $10 < X \leq 30$ :  $\pm 0.5$  mm  
 $30 < X \leq 100$ :  $\pm 1.0$  mm  
 unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL     | PLATING/COLOR |
|------|-------------|--------------|---------------|
| A    | housing     | PA6 (UL94HB) | black         |
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| C    | reed        | tin bronze   |               |

| TERMINAL CONNECTIONS |             |
|----------------------|-------------|
| TERMINAL             | DESCRIPTION |
| 1                    | Initial     |
| 2                    | Wiper       |
| 3                    | Final       |

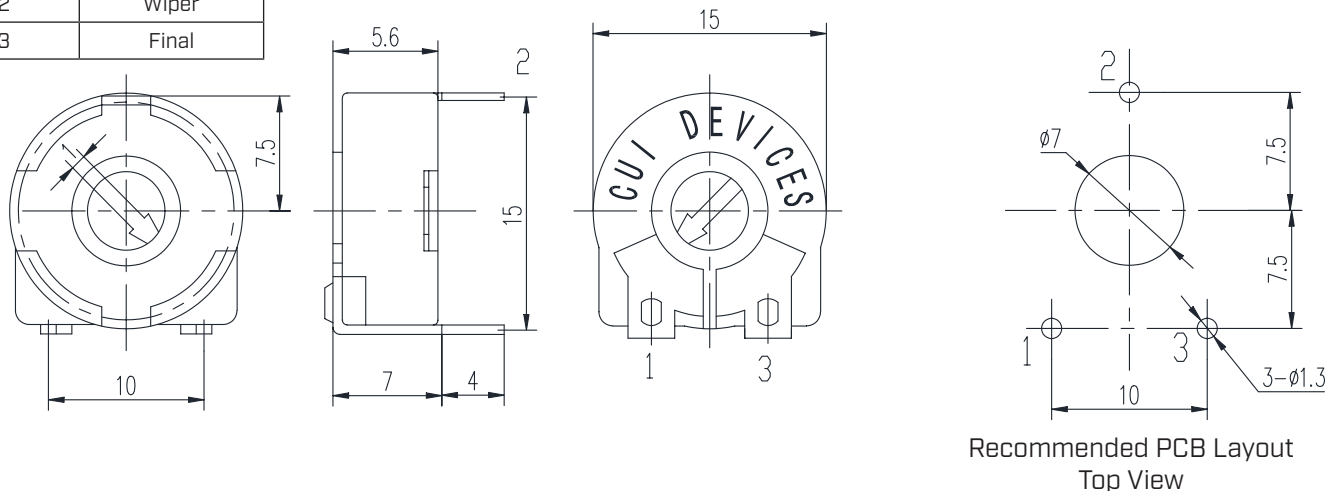


## MECHANICAL DRAWING (HORIZONTAL, STRAIGHT TERMINALS)

units: mm  
 tolerance:  
 $X \leq 10$ :  $\pm 0.3$  mm  
 $10 < X \leq 30$ :  $\pm 0.5$  mm  
 $30 < X \leq 100$ :  $\pm 1.0$  mm  
 unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL     | PLATING/COLOR |
|------|-------------|--------------|---------------|
| A    | housing     | PA6 (UL94HB) | black         |
| B    | terminals   | steel        | tin           |
| C    | reed        | tin bronze   |               |

| TERMINAL CONNECTIONS |             |
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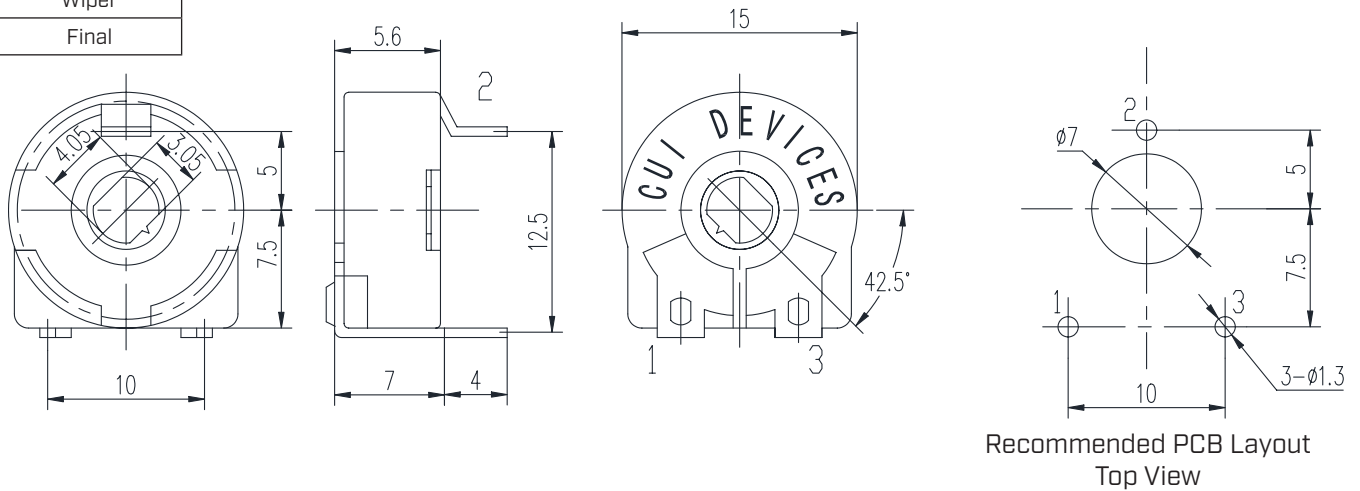


## MECHANICAL DRAWING (HORIZONTAL, STRAIGHT INWARD TERMALS)

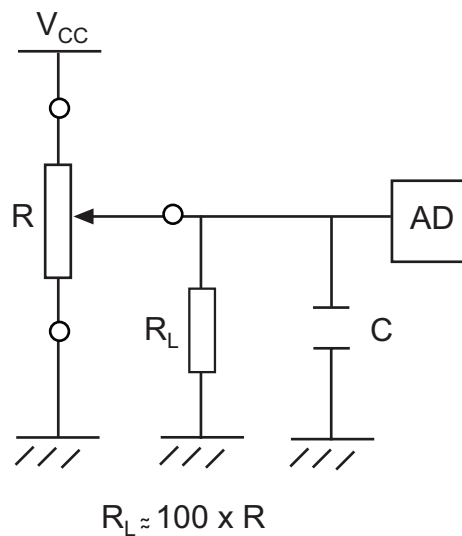
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 tolerance:  
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| TERMINAL CONNECTIONS |             |
|----------------------|-------------|
| TERMINAL             | DESCRIPTION |
| 1                    | Initial     |
| 2                    | Wiper       |
| 3                    | Final       |



## RECOMMENDED CIRCUIT



## POWER DERATING CURVE

