



SERIES: PTN10 | DESCRIPTION: TRIMMER POTENTIOMETER

FEATURES

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



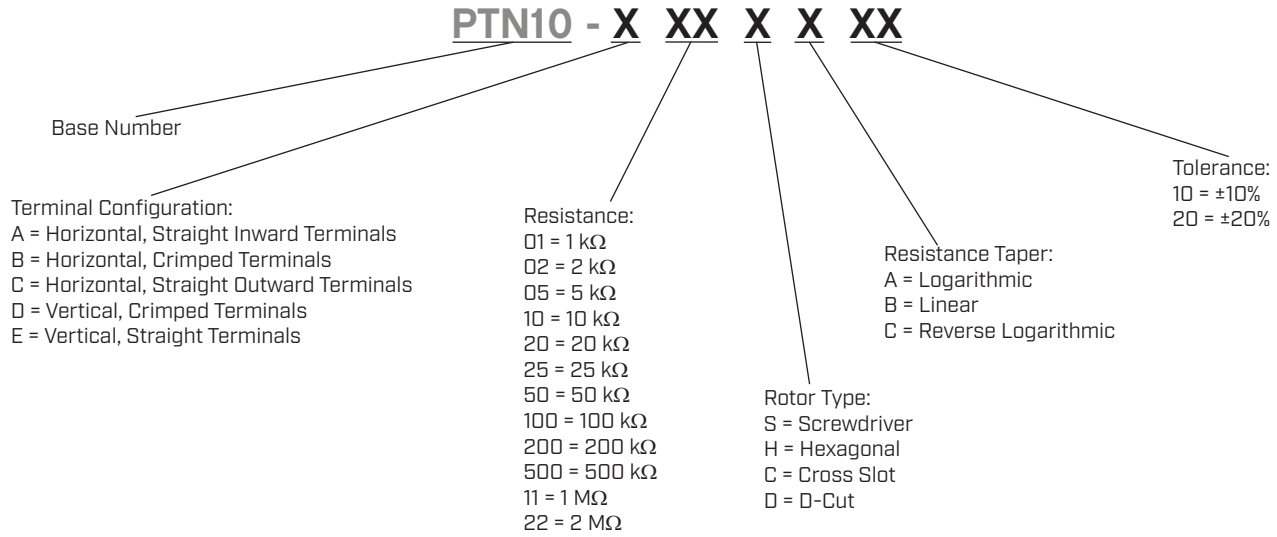
SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|-------------------------------|--|-----|-----|-------|-------|
| maximum operating voltage | | | | 200 | Vdc |
| power rating | at 70°C | | | 0.15 | 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 | | | | |

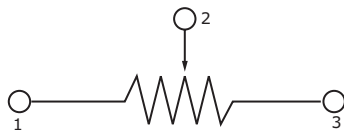
MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|-------------------|------------------------|-----|-----|--------|--------|
| mechanical angle | | 225 | 235 | 245 | ° |
| rotational torque | | 10 | | 80 | gf-cm |
| stop strength | | 400 | | | gf-cm |
| rotational life | | | | 10,000 | cycles |
| weight | varies by model | 0.5 | | 0.7 | g |

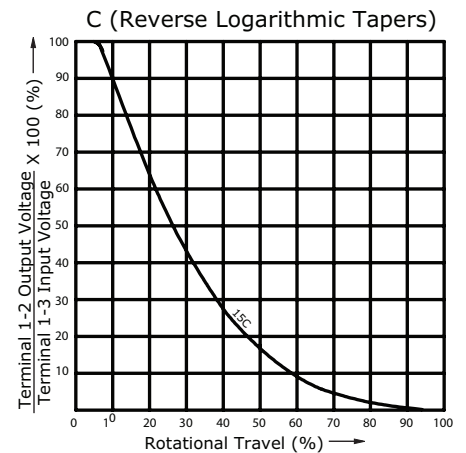
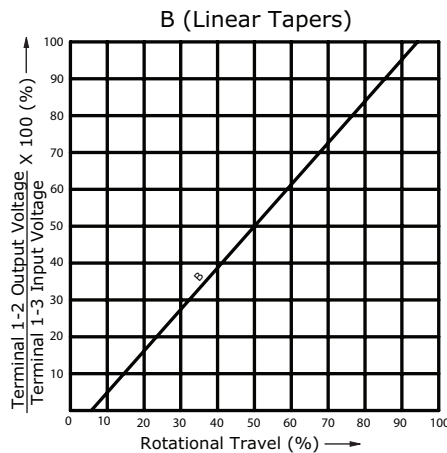
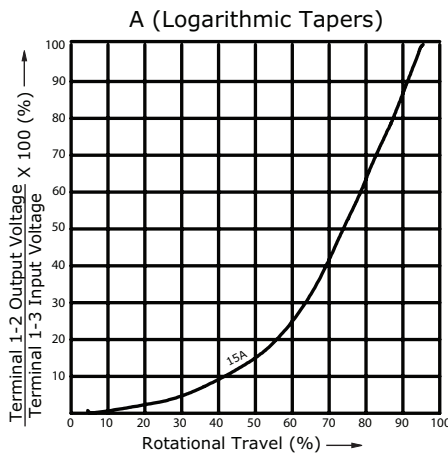
PART NUMBER KEY



SCHEMATIC/TAPERS

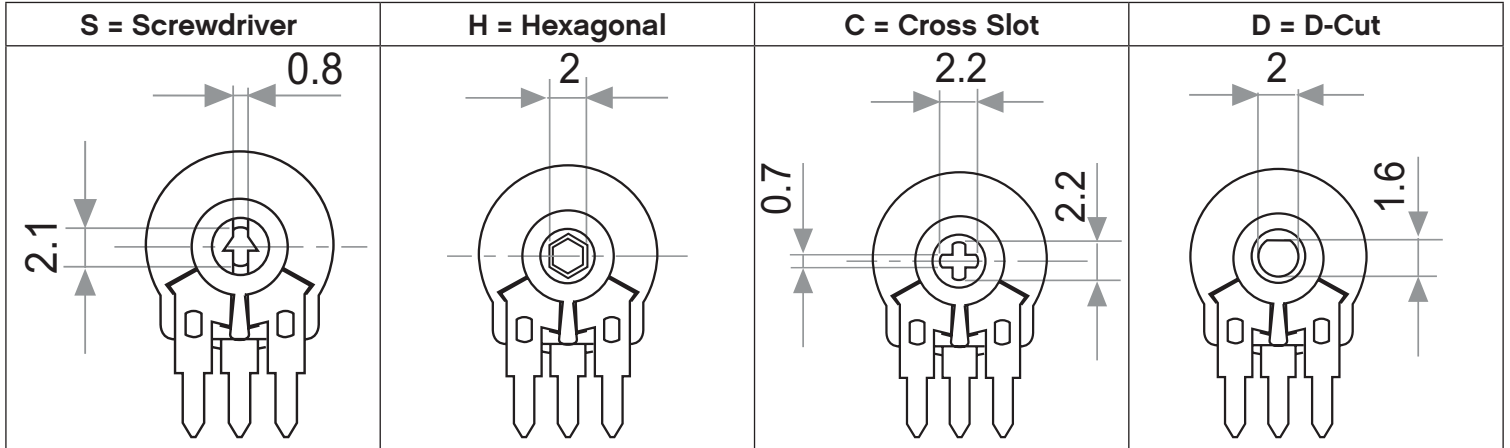


| Resistance Table | |
|------------------|------|
| Resistance [KΩ] | Code |
| 1 | 01 |
| 2 | 02 |
| 5 | 05 |
| 10 | 10 |
| 20 | 20 |
| 25 | 25 |
| 50 | 50 |
| 100 | 100 |
| 200 | 200 |
| 500 | 500 |
| 1,000 | 11 |
| 2,000 | 22 |



ROTOR TYPE

units: mm
 tolerance: ±0.3 mm
 unless otherwise noted



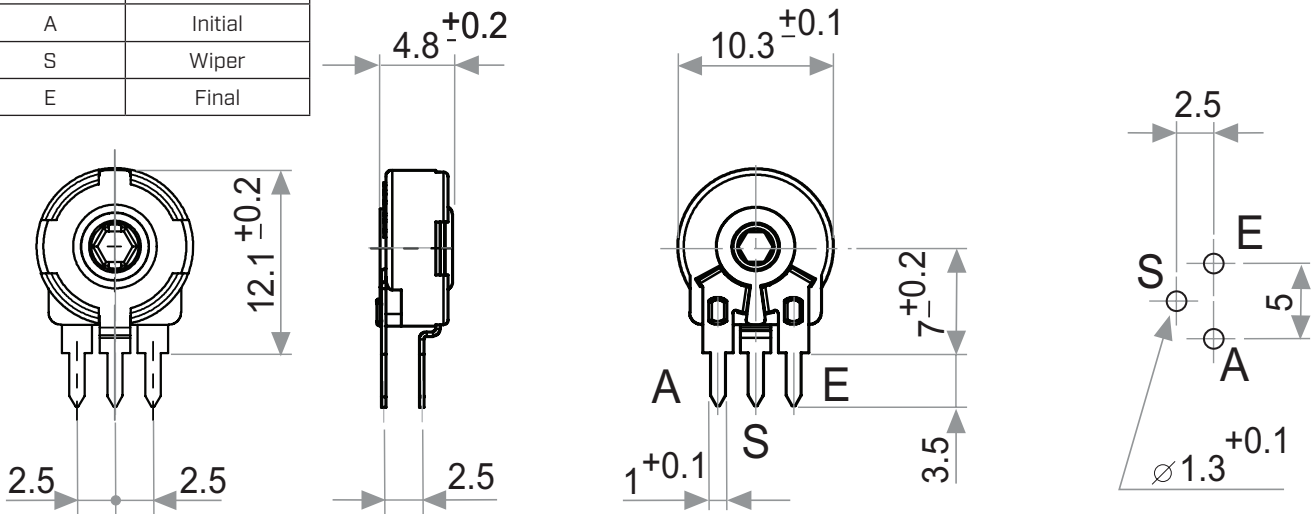
Note: Default delivery is at initial position of wiper.

MECHANICAL DRAWING (HORIZONTAL, STRAIGHT INWARD TERMINALS)

units: mm
 tolerance:
 $X \leq 10$: ±0.3 mm
 $10 < X \leq 30$: ±0.5 mm
 $30 < X \leq 100$: ±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 |
| A | Initial |
| S | Wiper |
| E | Final |



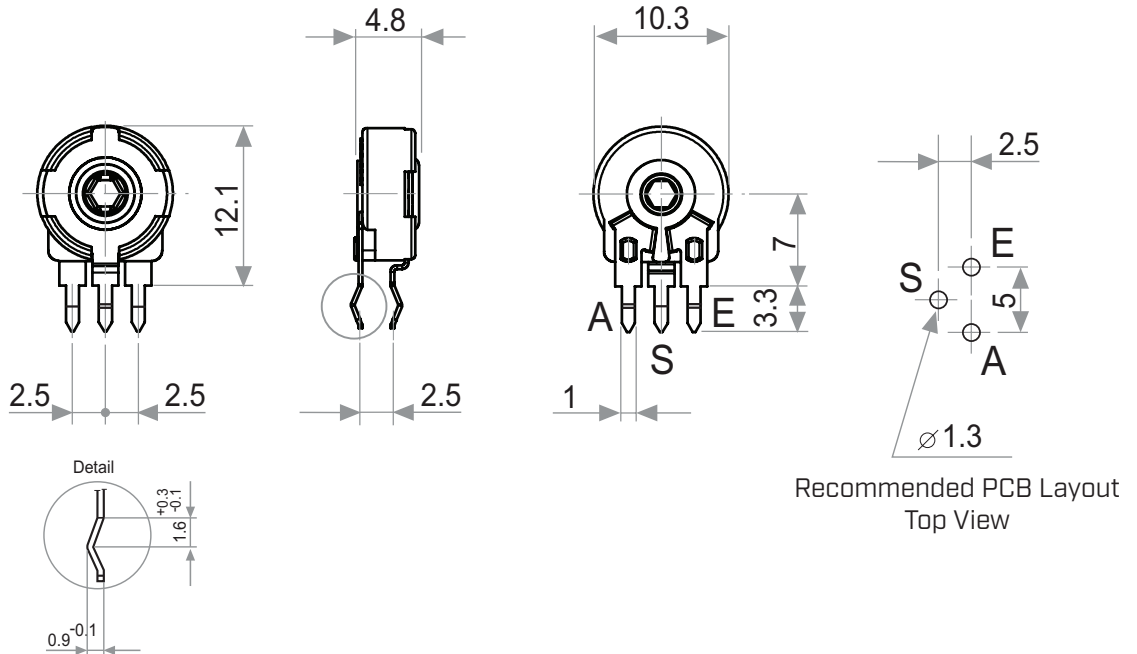
Recommended PCB Layout
 Top View

MECHANICAL DRAWING (HORIZONTAL, CRIMPED TERMINALS)

units: mm
 tolerance:
 $X \leq 10$: ± 0.3 mm
 $10 < X \leq 30$: ± 0.5 mm
 $30 < X \leq 100$: ± 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 |
| A | Initial |
| S | Wiper |
| E | Final |

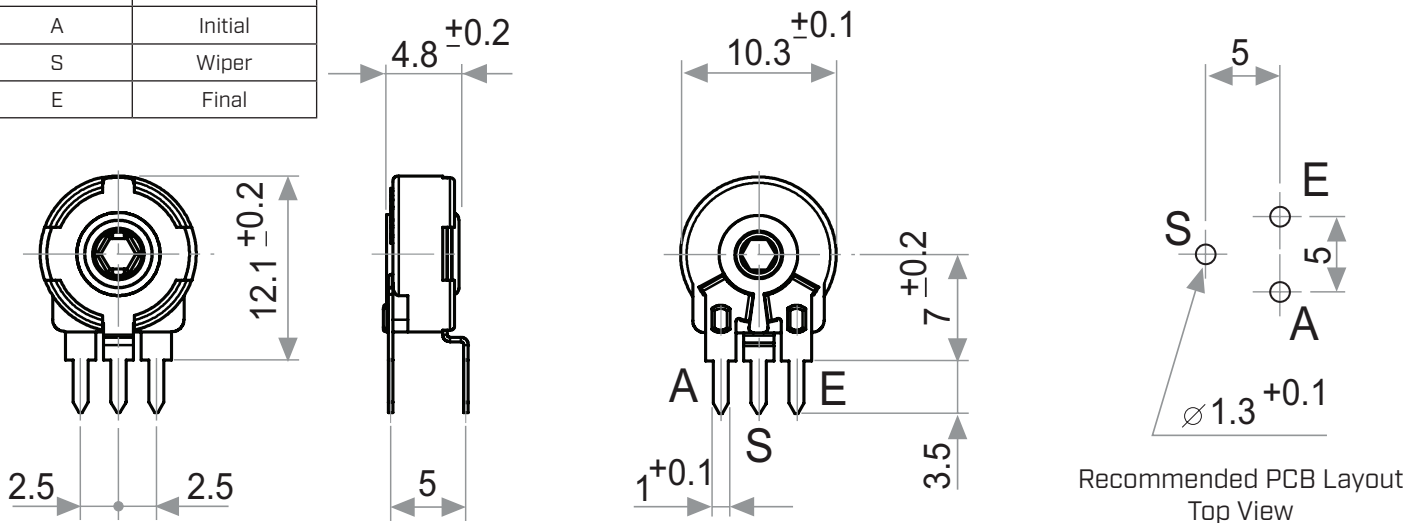


MECHANICAL DRAWING (HORIZONTAL, STRAIGHT OUTWARD TERMINALS)

units: mm
 tolerance:
 $X \leq 10$: ± 0.3 mm
 $10 < X \leq 30$: ± 0.5 mm
 $30 < X \leq 100$: ± 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 |
| A | Initial |
| S | Wiper |
| E | Final |

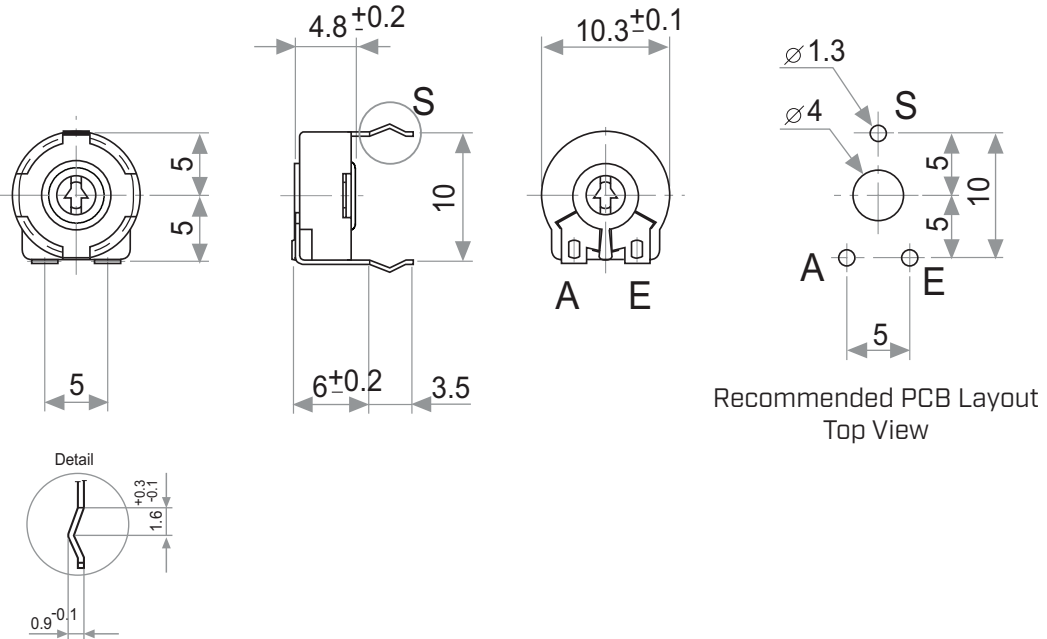


MECHANICAL DRAWING (VERTICAL, CRIMPED TERMINALS)

units: mm
 tolerance:
 $X \leq 10$: ± 0.3 mm
 $10 < X \leq 30$: ± 0.5 mm
 $30 < X \leq 100$: ± 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 |
| A | Initial |
| S | Wiper |
| E | Final |

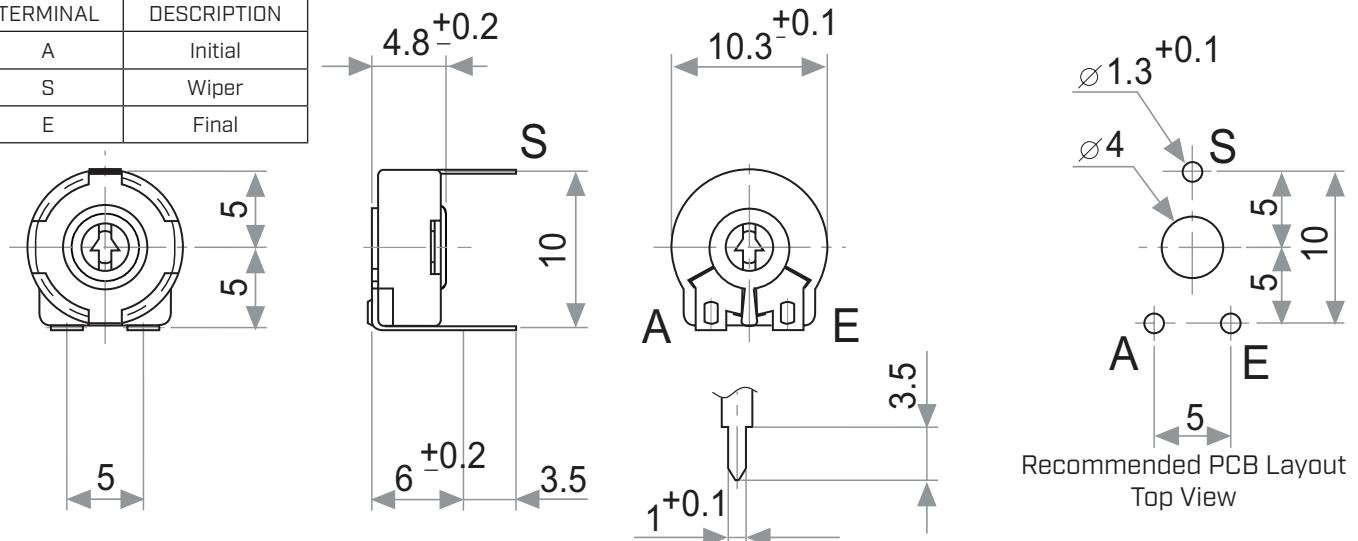


MECHANICAL DRAWING (VERTICAL, STRAIGHT TERMINALS)

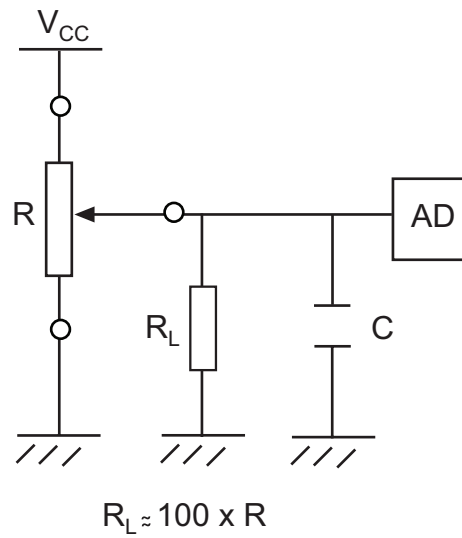
units: mm
 tolerance:
 $X \leq 10$: ± 0.3 mm
 $10 < X \leq 30$: ± 0.5 mm
 $30 < X \leq 100$: ± 1.0 mm
 unless otherwise noted

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

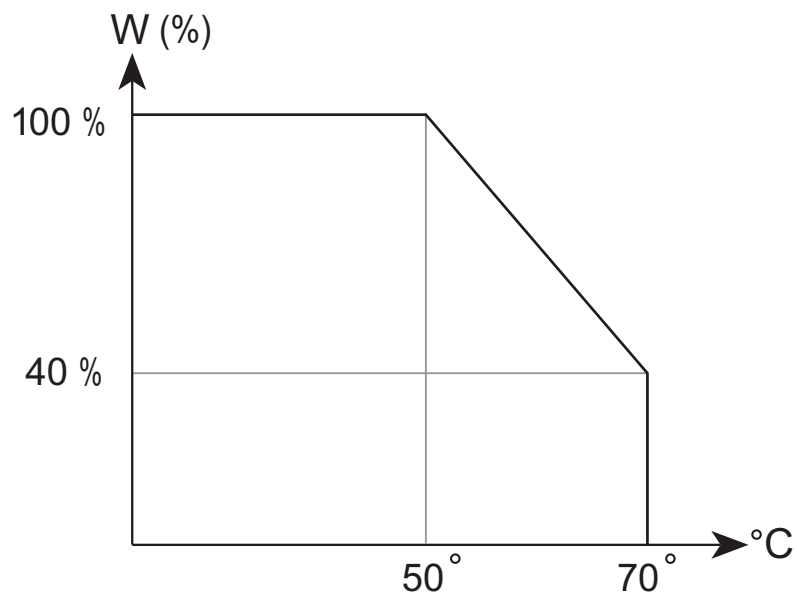
| TERMINAL CONNECTIONS | |
|----------------------|-------------|
| TERMINAL | DESCRIPTION |
| A | Initial |
| S | Wiper |
| E | Final |



RECOMMENDED CIRCUIT



POWER DERATING CURVE



REVISION HISTORY

| rev. | description | date |
|------|-----------------------------------|------------|
| 1.0 | initial release | 06/22/2022 |
| 1.01 | logo, datasheet style update | 08/05/2022 |
| 1.02 | updated taper detail | 01/15/2024 |
| 1.03 | updated datasheet | 04/16/2024 |
| 1.04 | CUI Devices rebranded to Same Sky | 09/12/2024 |

The revision history provided is for informational purposes only and is believed to be accurate.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

[sameskydevices.com](https://www.sameskydevices.com)