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SERIES: PTN15 | DESCRIPTION: TRIMMER POTENTIOMETER

FEATURES

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



RoHS

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		50		200	gf-cm
stop strength		1,000			gf-cm
rotational life				10,000	cycles
weight		1.29	1.32	1.35	g

PART NUMBER KEY

PTN15 - X XX X X XX - X

Base Number

Terminal Configuration:
A = Horizontal, Straight Inward Terminals
C = Horizontal, Straight Outward Terminals
E = Vertical, Straight Terminals
F = Vertical, Straight Inward Terminals

Resistance:
01 = 1 kΩ
02 = 2 kΩ
05 = 5 kΩ
10 = 10 kΩ
20 = 20 kΩ
25 = 25 kΩ
50 = 50 kΩ
100 = 100 kΩ
200 = 200 kΩ
500 = 500 kΩ
11 = 1 MΩ
22 = 2 MΩ

Rotor Type:
S = Screwdriver
H = Hexagonal
D = D-Cut
N = Notch

Resistance Taper:
A = Logarithmic
B = Linear
C = Reverse Logarithmic

Tolerance:
10 = ±10%
20 = ±20%

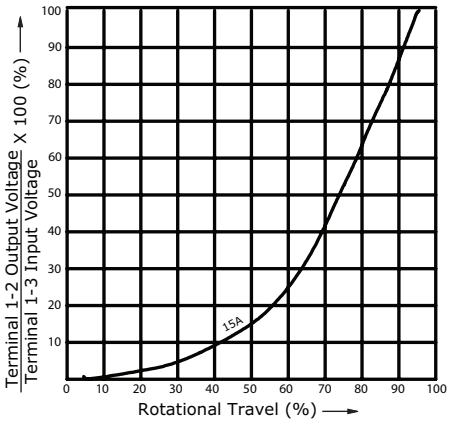
Wiper Position:
blank = initial
H = 50%

SCHEMATIC/TAPERS

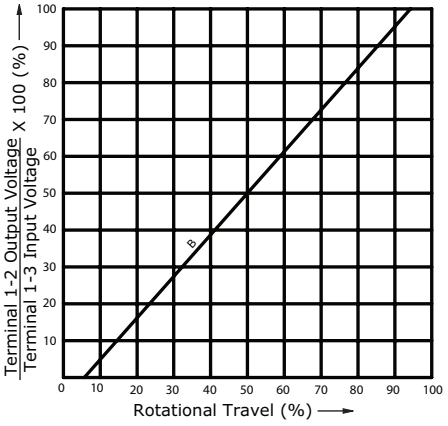


Resistance Table	
Resistance (KΩ)	Code
1	01
2	02
5	05
10	10
20	20
25	25
50	50
100	100
200	200
500	500
1,000	11
2,000	22

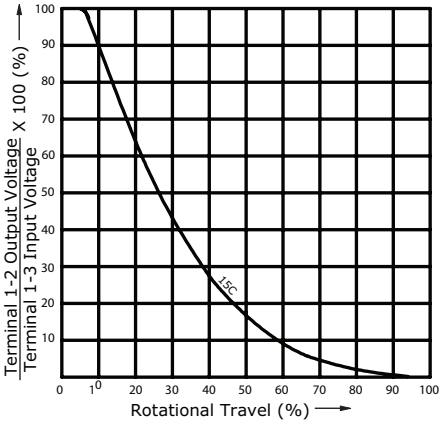
A (Logarithmic Tapers)



B (Linear Tapers)

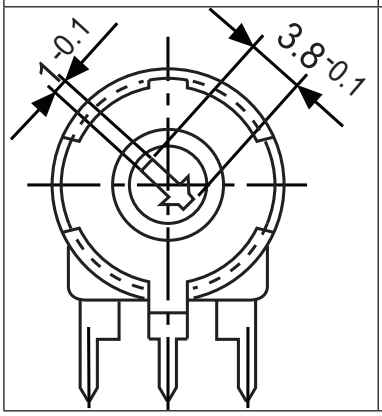
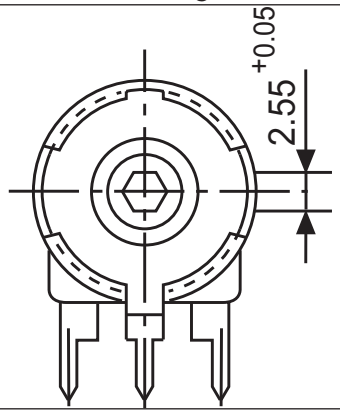
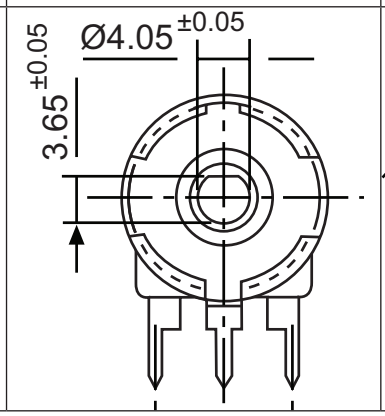
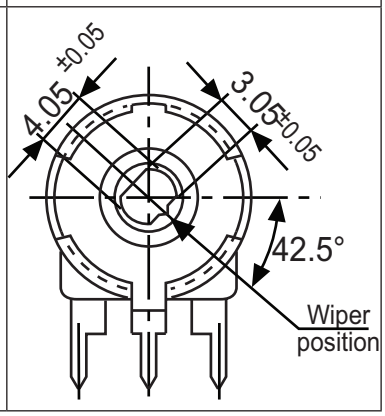


C (Reverse Logarithmic Tapers)



ROTOR TYPE

units: mm
tolerance: ±0.3 mm
unless otherwise noted

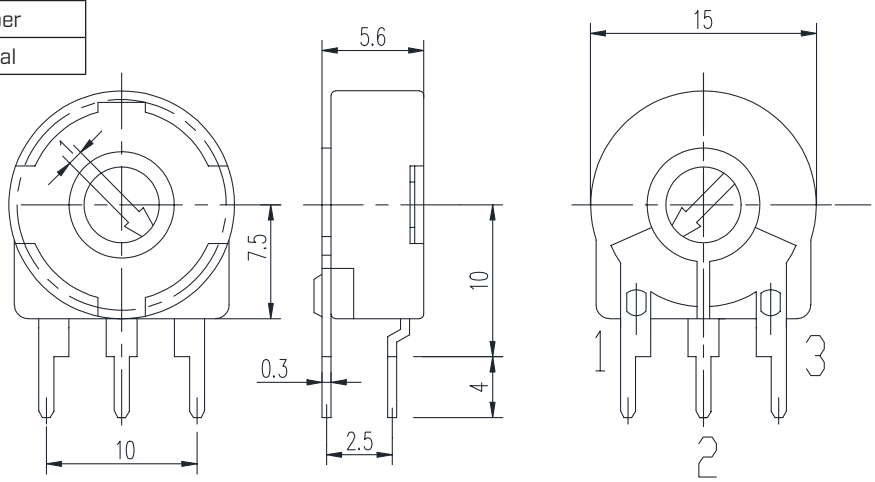
S = Screwdriver	H = Hexagonal	D = D-Cut	N = Notch
			

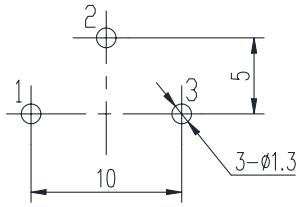
MECHANICAL DRAWING (HORIZONTAL, STRAIGHT INWARD TERMINALS)

units: mm
tolerance:
X≤10: ±0.3 mm
10<X≤30: ±0.5 mm
30<X≤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
1	Initial
2	Wiper
3	Final





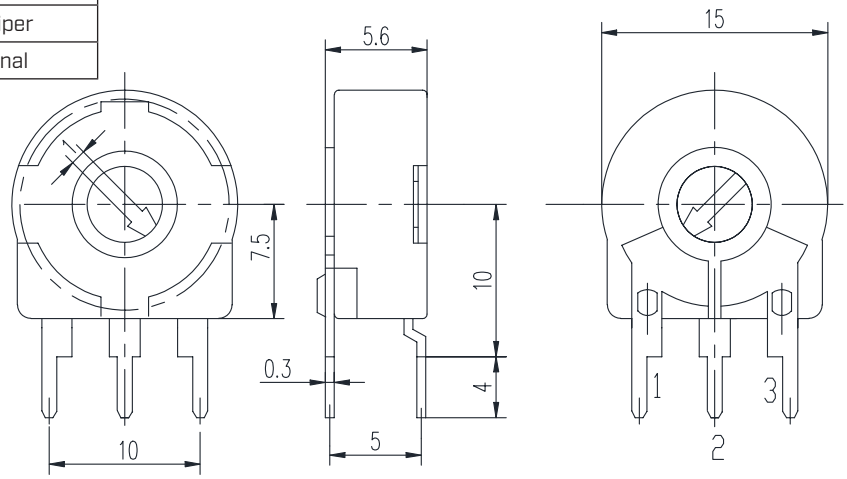
Recommended PCB Layout
Top View

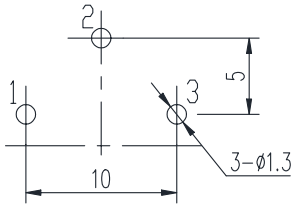
MECHANICAL DRAWING (HORIZONTAL, STRAIGHT OUTWARD TERMINALS)

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

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
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TERMINAL	DESCRIPTION
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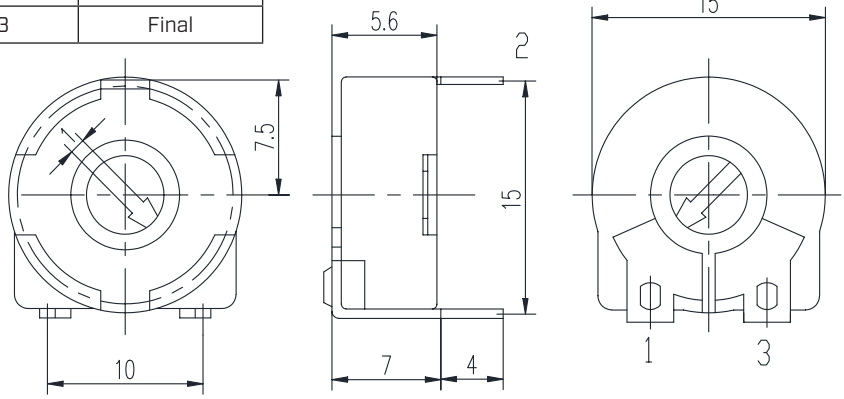
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Top View

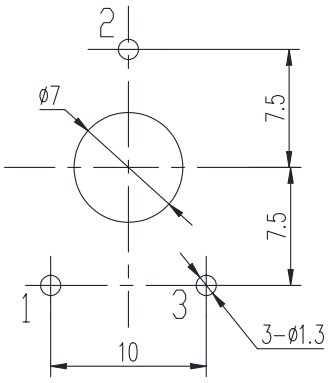
MECHANICAL DRAWING (VERTICAL, STRAIGHT TERMINALS)

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

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
A	housing	PA6 (UL94HB)	black
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TERMINAL CONNECTIONS	
TERMINAL	DESCRIPTION
1	Initial
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3	Final





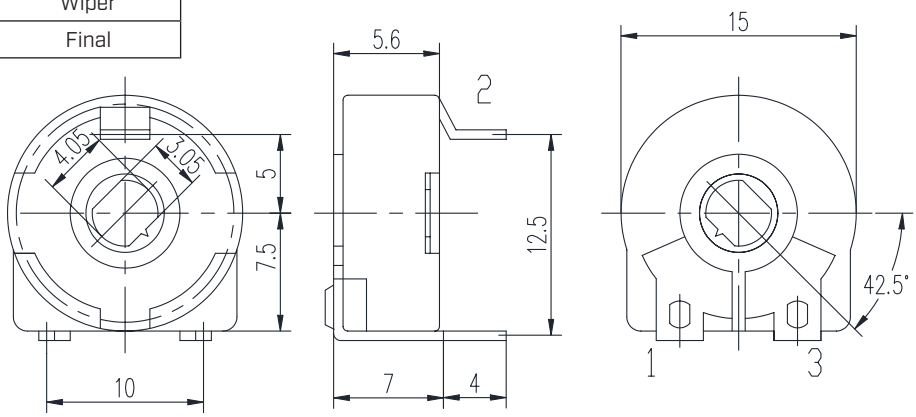
Recommended PCB Layout
Top View

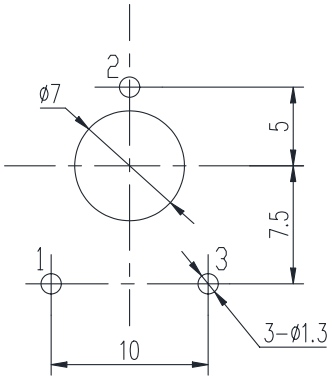
MECHANICAL DRAWING (VERTICAL, STRAIGHT INWARD TERMALS)

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

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
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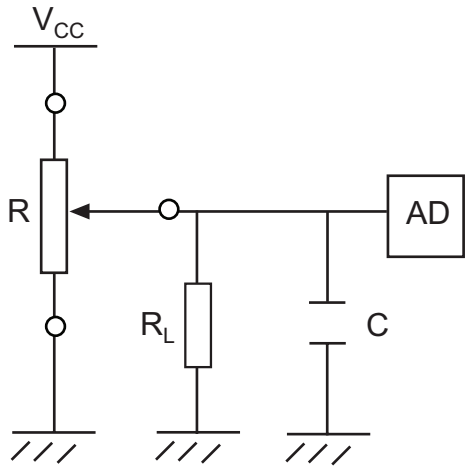
TERMINAL CONNECTIONS	
TERMINAL	DESCRIPTION
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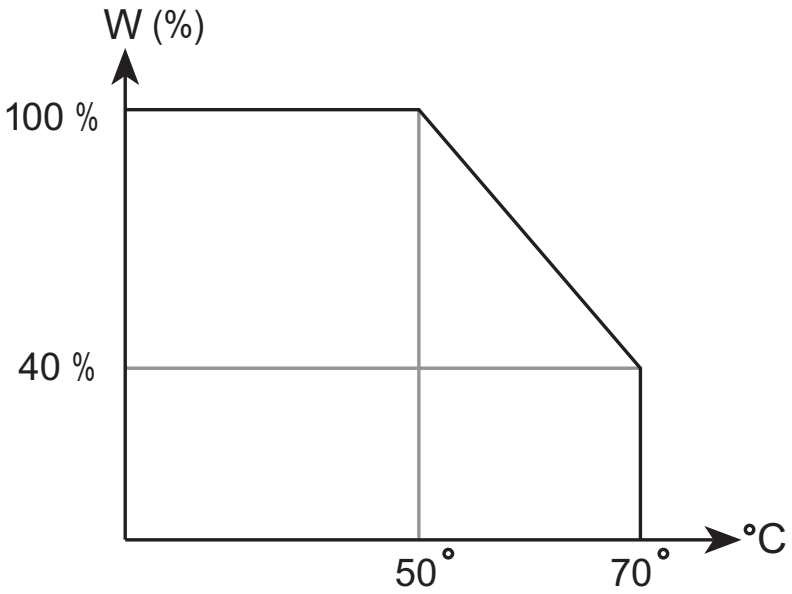
Recommended PCB Layout
Top View

RECOMMENDED CIRCUIT



$R_L \approx 100 \times R$

POWER DERATING CURVE



REVISION HISTORY

rev.	description	date
1.0	initial release	10/27/2022
1.01	updated datasheet	02/28/2023
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

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.

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