

**SERIES:** PTN09SX | **DESCRIPTION:** ROTARY POTENTIOMETER**FEATURES**

- ganging up to 2 sections
- switch
- 41 detent option
- carbon element
- multiple shaft options

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
maximum operating voltage				10 50	Vdc Vac
power rating				0.05	W
taper	linear, logarithmic, and reverse logarithmic				
standard resistance range	see Resistance Table	1		1,000	k $\Omega$
standard resistance tolerance			$\pm 20$		%
sliding noise				68	mV
operating temperature		-10		75	$^{\circ}\text{C}$
hand soldering	for 3 seconds max			350	$^{\circ}\text{C}$
wave soldering	for 5 seconds max			260	$^{\circ}\text{C}$
RoHS	yes				

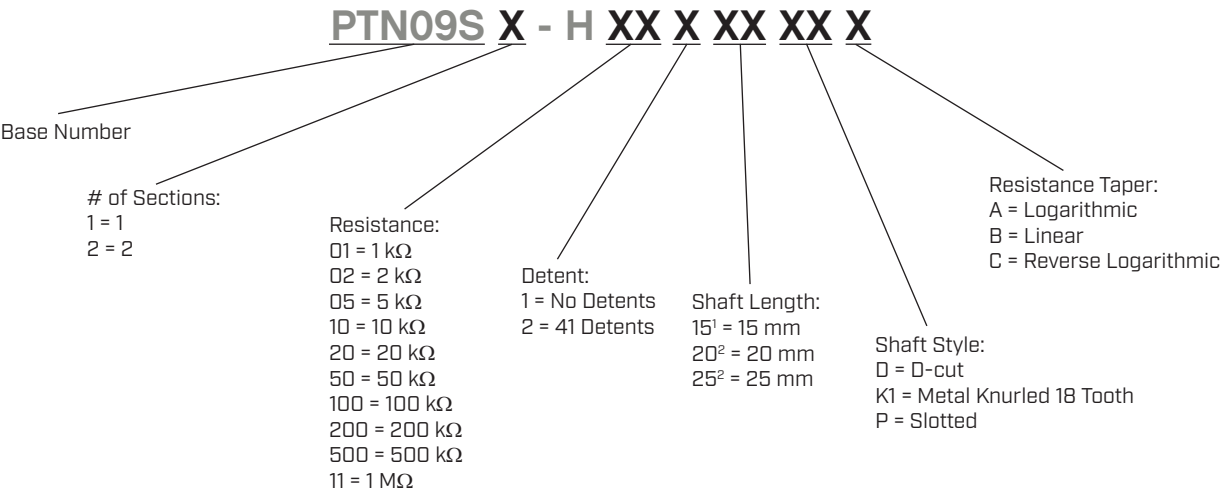
**MECHANICAL**

parameter	conditions/description	min	typ	max	units
mechanical angle		290	300	310	$^{\circ}$
rotational torque		20		150	gf-cm
stop strength		4.0			kg-cm
shaft wobble	0.5xL/30 mm p-p max				
rotational life			10,000		cycles
weight			5.5		g

**ROTARY SWITCH SPECIFICATIONS**

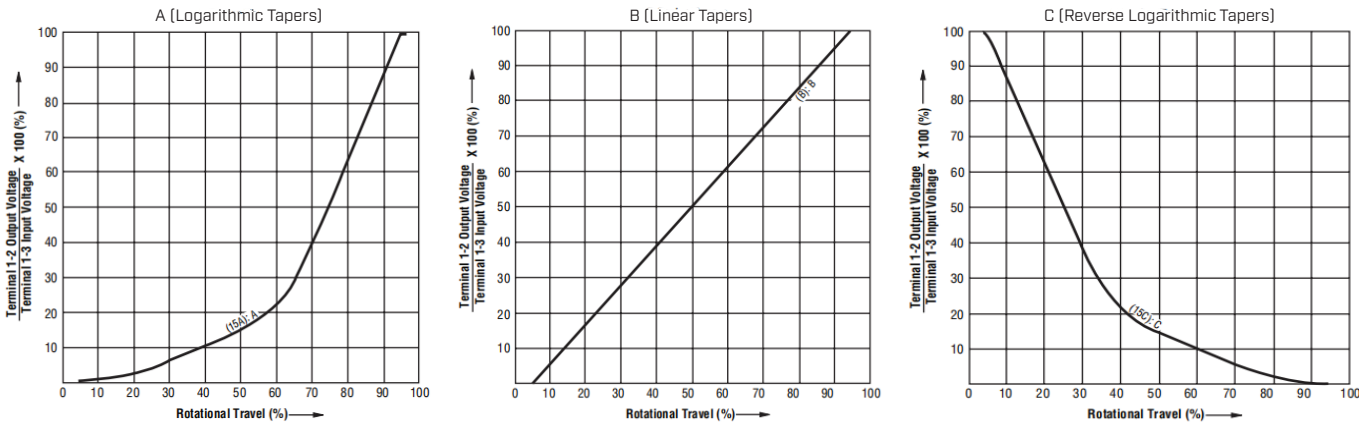
parameter	conditions/description	min	typ	max	units
rating	16 Vdc at 3 A				
contact resistance				50	m $\Omega$
switch torque		100		500	gf-cm
switch angle				50	$^{\circ}$

PART NUMBER KEY



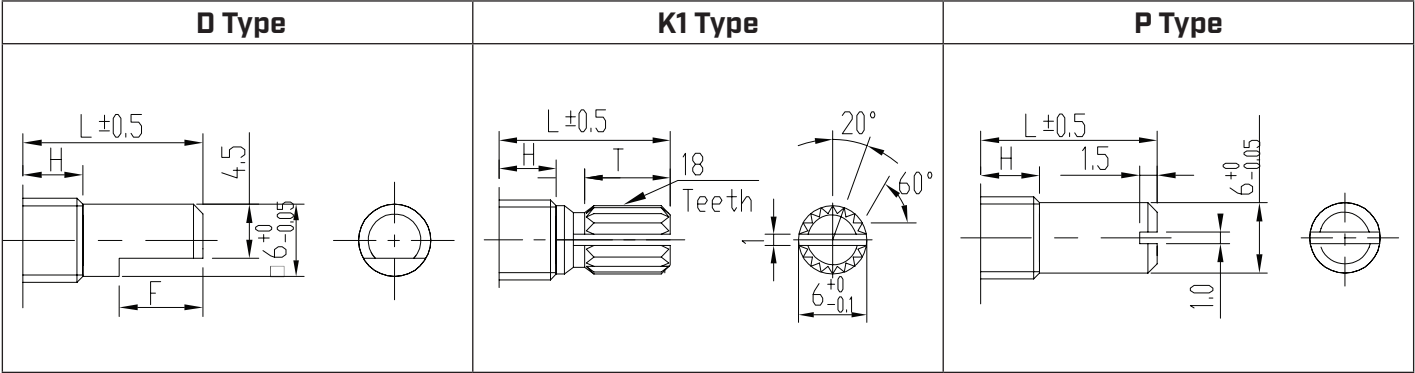
Note: 1. 5 mm bushing length offered on 15 mm shaft only.  
2. 7 mm bushing length offered on 20 & 25 mm shafts only.

TAPERS



SHAFT TYPES

units: mm  
tolerance:  
X≤10.00: ±0.30 mm  
10.00<X≤30.00: ±0.50 mm  
30.00<X≤100.00: ±1.0 mm  
unless otherwise noted



H	5	7	7
L	15	20	25
F	7	12	12

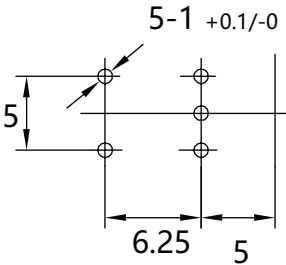
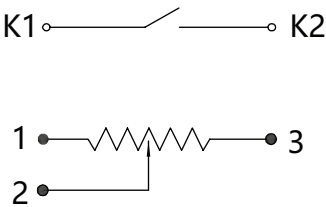
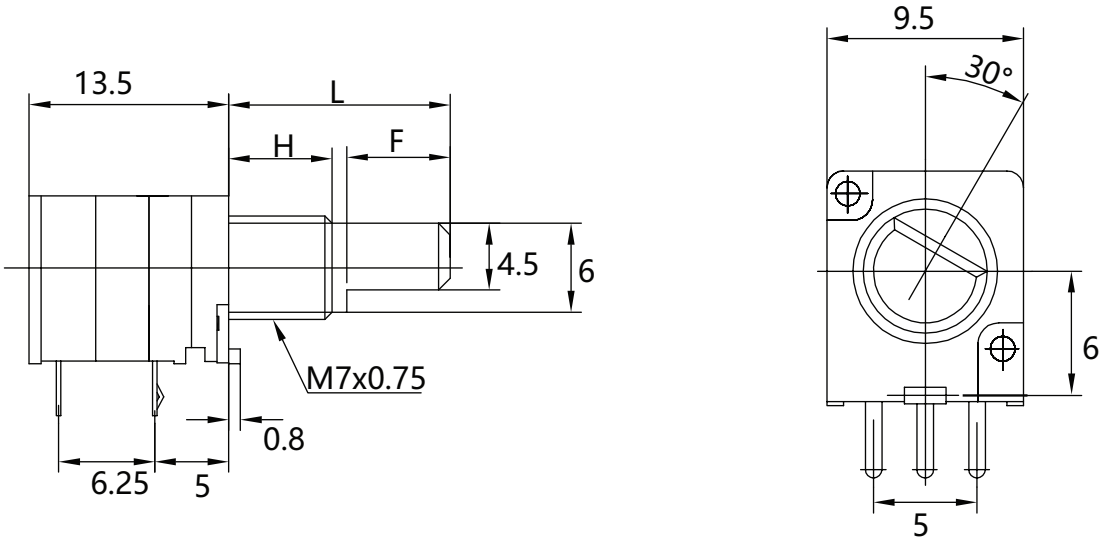
H	5	7	7
L	15	20	25
T	6	10	12

H	5	7	7
L	15	20	25

MECHANICAL DRAWING (SINGLE SECTION CONFIGURATION)

units: mm  
tolerance:  
 $X \leq 10.00$ :  $\pm 0.30$  mm  
 $10.00 < X \leq 30.00$ :  $\pm 0.50$  mm  
 $30.00 < X \leq 100.00$ :  $\pm 1.0$  mm  
unless otherwise noted

DESCRIPTION	MATERIAL
shaft	aluminum
bushing	zinc alloy
driving plate & driving head	POM
rivet	aluminum
reed	phosphor copper
base	PBT
carbon plate	FR4 substrate
terminal	cold rolled strip
cover plate	PBT
bracket	cold rolled strip
switch strut	brass
blade of knife switch	brass
switch terminal	brass
spring	spring wire

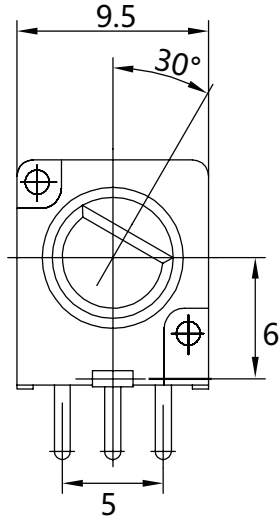
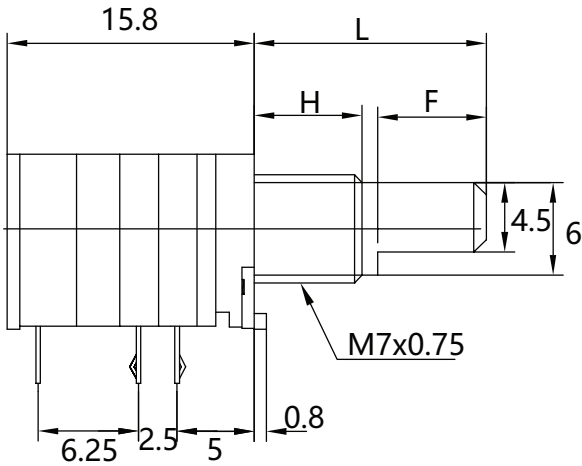


Recommended PCB Layout  
Top View

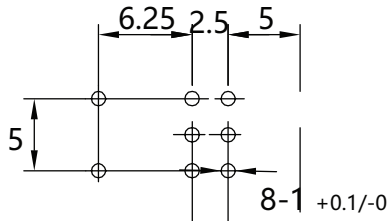
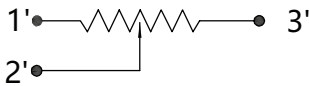
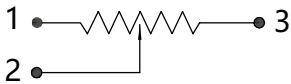
MECHANICAL DRAWING (DOUBLE SECTION CONFIGURATION)

units: mm  
tolerance:  
 $X \leq 10.00$ :  $\pm 0.30$  mm  
 $10.00 < X \leq 30.00$ :  $\pm 0.50$  mm  
 $30.00 < X \leq 100.00$ :  $\pm 1.0$  mm  
unless otherwise noted

DESCRIPTION	MATERIAL
shaft	aluminum
bushing	zinc alloy
driving plate & driving head	POM
rivet	aluminum
reed	phosphor copper
base	PBT
carbon plate	FR4 substrate
terminal	cold rolled strip
cover plate	PBT
bracket	cold rolled strip
switch strut	brass
blade of knife switch	brass
switch terminal	brass
spring	spring wire



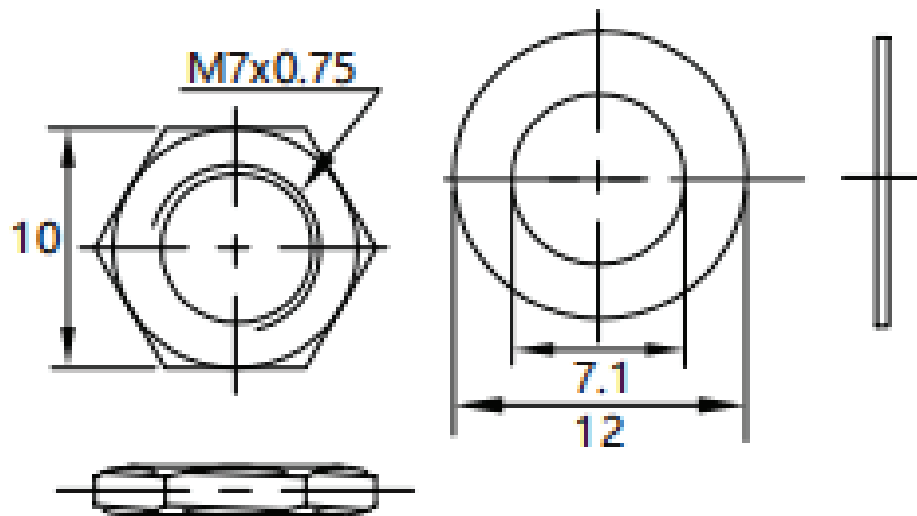
K1 ——— K2



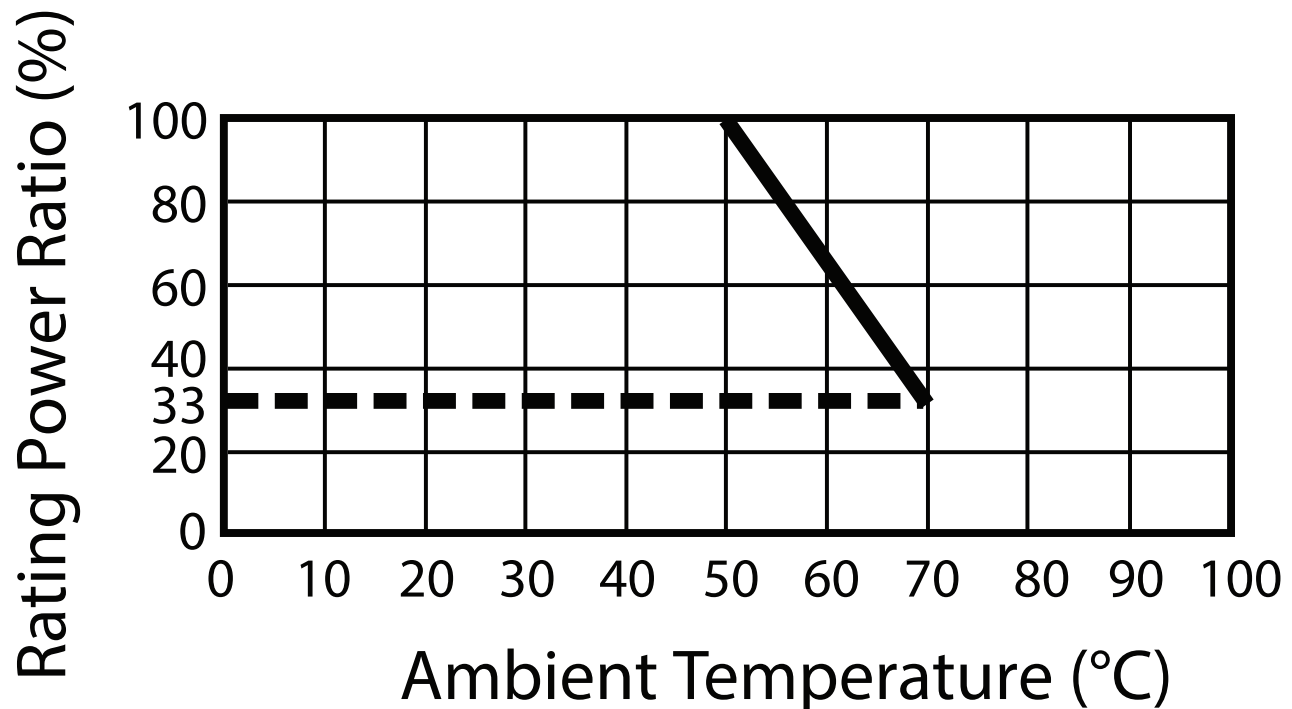
Recommended PCB Layout  
Top View

## MOUNTING HARDWARE

units: mm  
tolerance:  
X≤10.00: ±0.30 mm  
unless otherwise noted



## POWER DERATING CURVE



REVISION HISTORY

rev.	description	date
1.0	initial release	08/01/2024
1.01	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.

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