

Features

- Carbon element
- Knurled / flatted / plain shaft styles
- Reverse log / linear / log taper option
- Rotary switch
- RoHS compliant*

RK09H Series - 9 mm Multi-Ganged Potentiometer /Rotary Switch

Electrical Characteristics

Standard Resistance Range
..... 1 K ohms to 1 M ohms
Total Resistance Tolerance
..... $\pm 20\%$
Standard Tapers
..... Linear & Reverse log & Log
Maximum Operating Voltage
..... 50 VAC, 10 VDC
Rated Power..... 0.05 watts
Noise 68 mV max.
Insulation Resistance @ 250 VDC
..... 100 M ohms min
Dielectric Withstanding Voltage ..300 VAC
Total Resistance error
..... $\leq 20\%R$

Environmental Characteristics

Operating Temperature
..... -10 °C to +75 °C
Rotational Life..... 10,000 cycles

Switch Characteristics

Contact Resistance 50 milliohms max.
Rated Power..... 3 A @ 16 VDC
Switch Torque 100 - 500gf-cm
Switch Angle..... 50 ° max.

Mechanical Characteristics

Mechanical Angle 300 ° $\pm 10^\circ$
Rotational Torque 20 to 150 gf-cm
Stop Strength..... 4.0 kgf-cm min
Shaft Wobble 0.5 x L/30 mm p-p max.
L=Shaft length

Soldering Condition

Manual Soldering

..... 350 °C max. for 3 seconds

Dip Soldering

..... 260 °C max. for 5 seconds

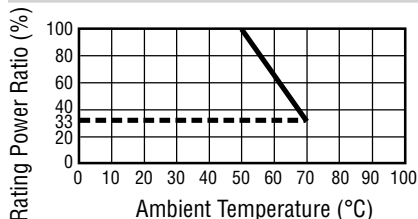
Mounting Hardware

..... One fat washer and one hex nut
supplied per potentiometer

Materials

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

Derating Curve



How To Order

Model **RK09 H - 1 - A - 15 K - B 103 - 0**

• RK09 = With Rotary Switch

Structure **H**

• H = Horizontal

No. of Sections **1**

• 1 = 1 Section

• 2 = 2 Sections

Bushing length **A**

• A = 5 mm

• B = 7 mm

Shaft Length **15**

• 15 = 15 mm

• 20 = 20 mm

• 25 = 25 mm

Shaft Styles **K**

• K = Knurled Type Shaft (Metal)

• F = Flatted Metal Shaft

• P = Plain Metal Shaft

Resistance Taper **A**

• A = Reverse log

• B = Linear

• C = Log

Resistance Code **103**

(See Table)

Detent options **0**

• 0 = No detent

• 1 = 41 detents

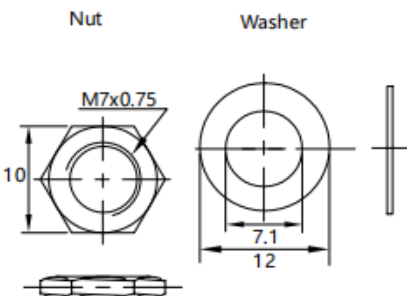
Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

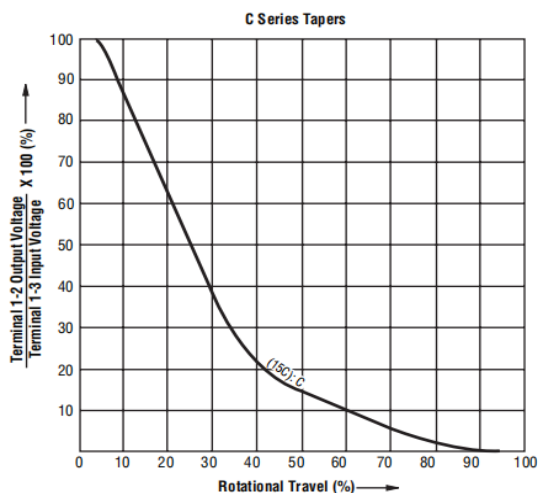
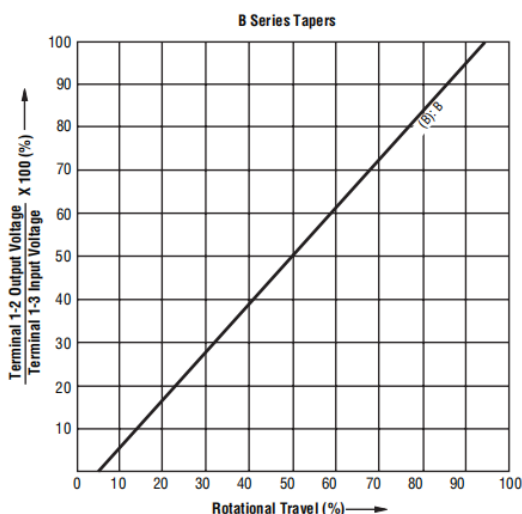
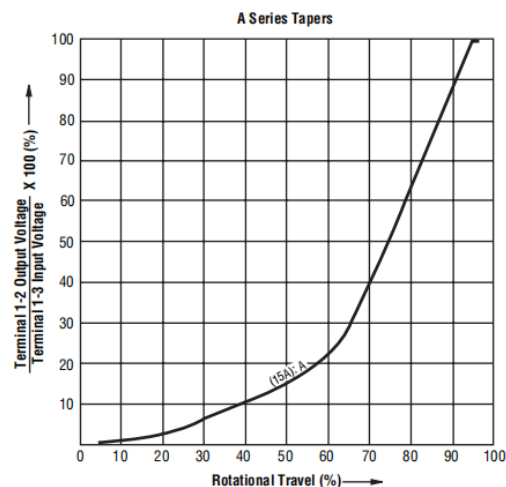
Typical weight

1 pc of RK09H weight.....5.5g $\pm$ 2g

Hardware



Tapers



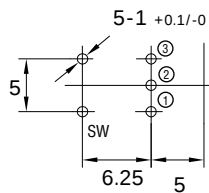
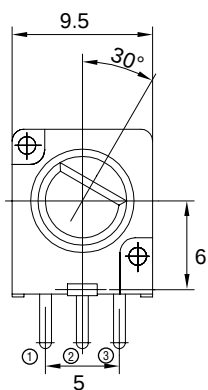
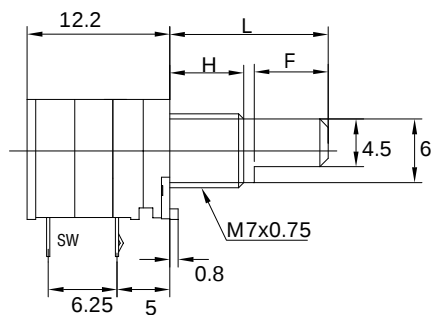
Applications

- Audio/TV sets
- Automotive sound systems
- Amplifiers/mixers/drum machines/synthesizers/DJ equipment
- Multimedia sound systems
- Portable electronics

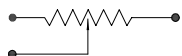
RK09H Series - 9 mm Multi-Ganged Potentiometer /Rotary Switch

Product Dimensions

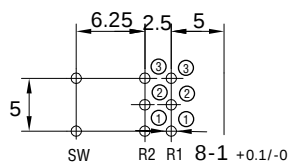
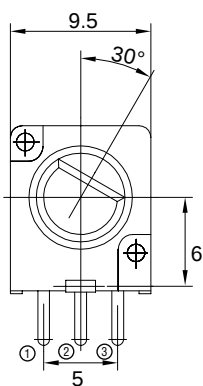
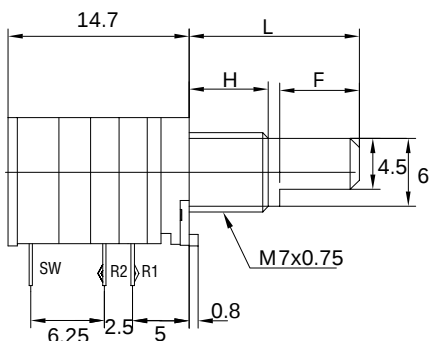
RK09H-1



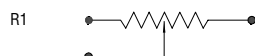
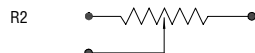
SW K1 K2



RK09H-2

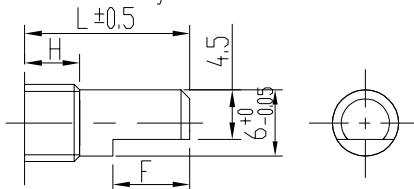


SW K1 K2



Shaft Styles

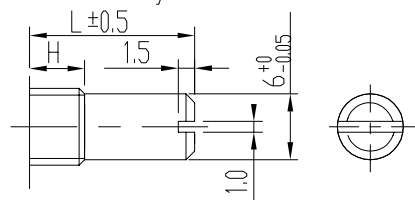
F Shaft Style



H=5	L	15	20	25
F	7	12	12	

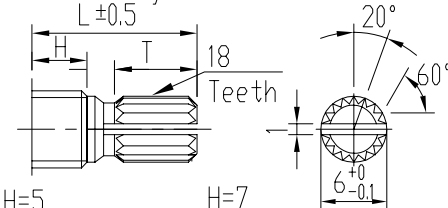
H=7	L	15	20	25
F	7	12	12	

P Shaft Style



L	15	20	25
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K Shaft Style



H=5	L	15	20	25
T	6	10	12	

H=7	L	15	20	25
T	6	10	12	

General Tolerance

Dimension:

$X < 10 \pm 0.3\text{mm}$

$10 \leq X < 30 \pm 0.5\text{mm}$

$30 \leq X \leq 100 \pm 1\text{mm}$

Angle: $\pm 5^\circ$