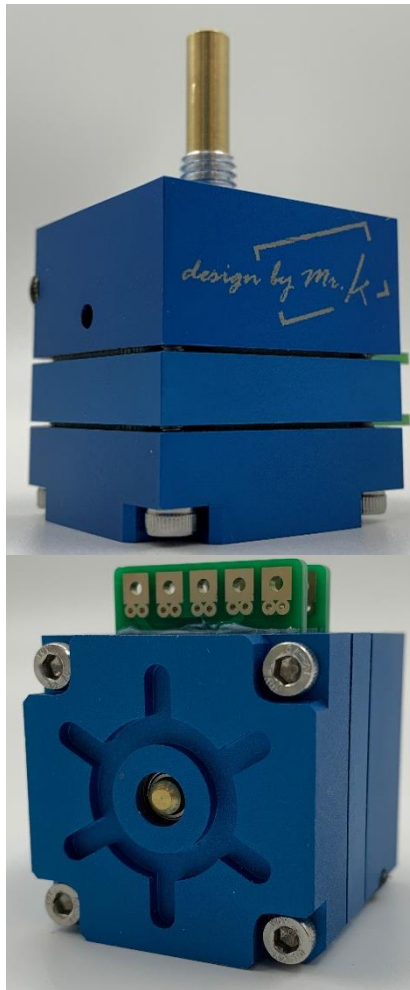


*design by Mr. K*

## 59 Steps Shunt Type Stepped Attenuator High Quality Passive Preamplifiers Carbon (5%) Film Resistor

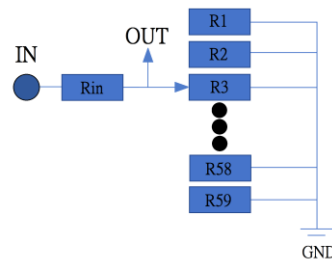


### Shunt Type Stepped Attenuators

This attenuator is formed by a fixed series of resistors and shunt resistors.

Signal is fed through the fixed resistor and different shunt resistors, which selected from 59 values ranging from zero to infinity.

Despite shunt design will introduce a variable input impedance, the benefit of single resistor and switch in signal path make up for any possible matching issue.



### SHUNT TYPE

Attenuation range: -60dB ... 0dB

Contact material: Hard gold

Mechanical life: > 10 000 cycles

CNC machined AL6063 aluminum

Indexing angle: 6 degree

Input Resistance: 10K, 24K, 47K, 100K, 250K ohm\*

Input Resistor Brand : A-B \*\*

Bearing: NMB

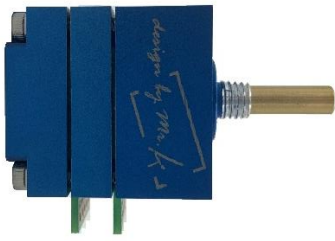
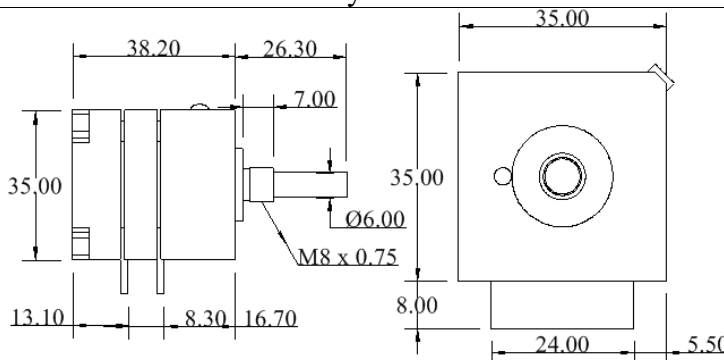
Ingress Protection Rating: IP54

Product Image	Part NO.	Type	Channel	Resistor Value	Resistor Type (Tolerance)	Resistance Taper	Size (L x W x H)
	SHS047K C15A	Shunt	Stereo	47K	Carbon (5%)	Refer. to Resistance Taper	35mm x 35mm x 38.2mm + (Shaft length 26.3mm)
	SHS100K C15A			100K	Carbon (5%)	15A***	

## Shunt Type Stepped Attenuators/ Product Dimensions

Dimensions:

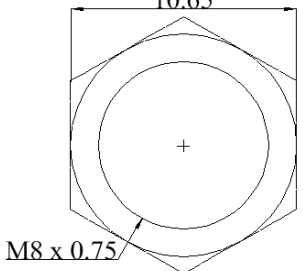
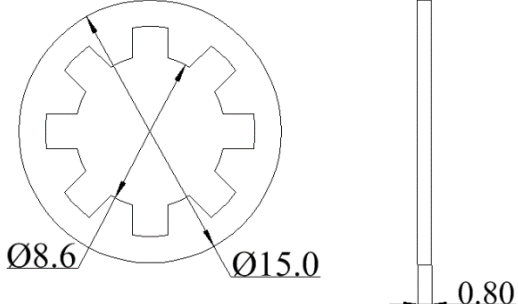
Unit: mm

Photo	Style
	

## Shunt Type Stepped Attenuators/ Attached Parts



The following parts are included with the product.

Unit: mm

Nut	Washer
	

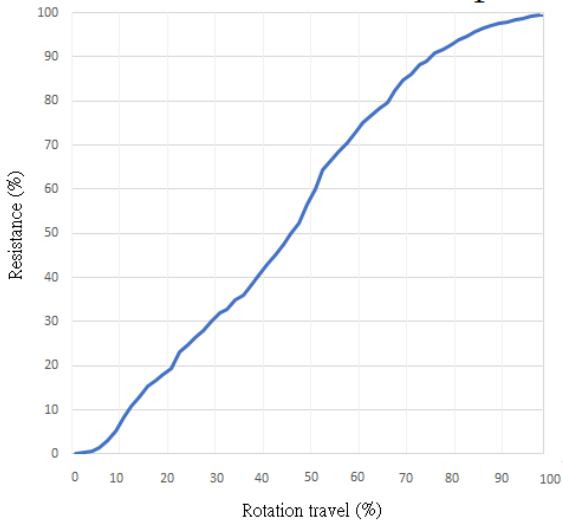
## Shunt Type Stepped Attenuators/ Soldering Info.

Resistor soldering position:

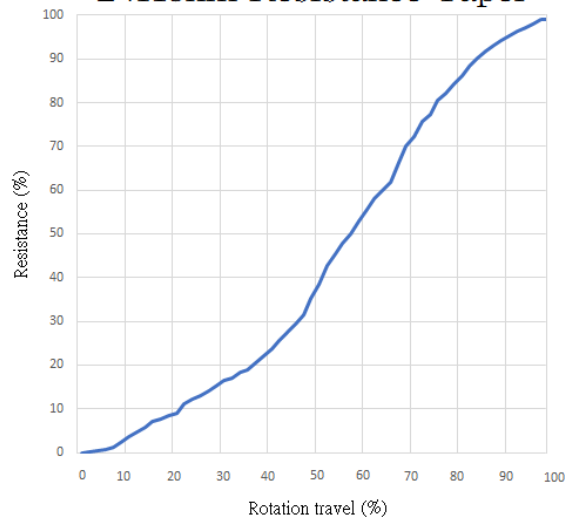
Font View	Bot View
	

# Shunt Type Stepped Attenuators/ Resistance Taper

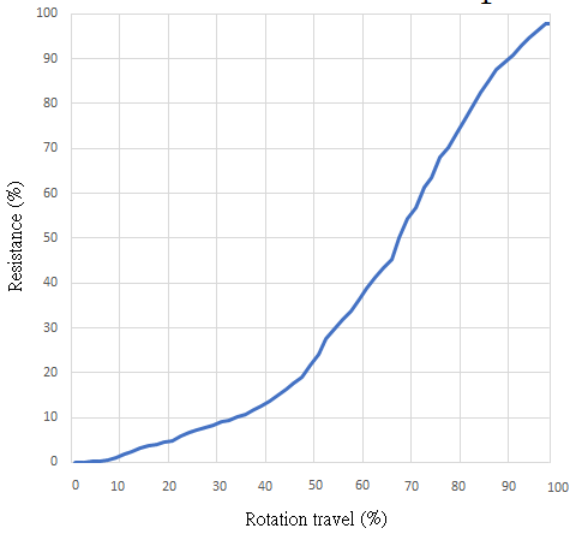
## 10Kohm Resistance Taper



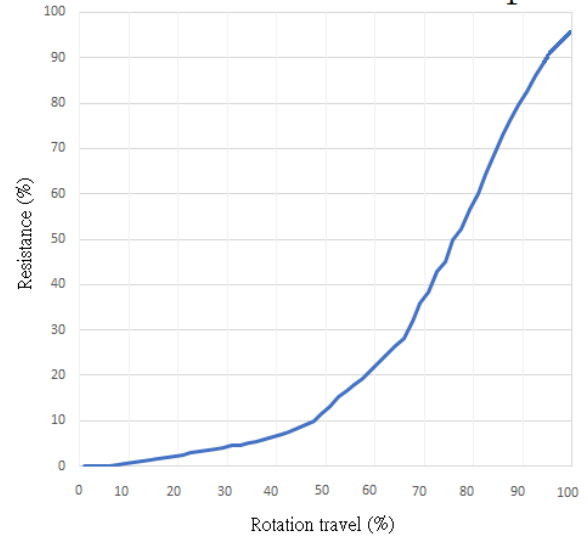
## 24Kohm Resistance Taper



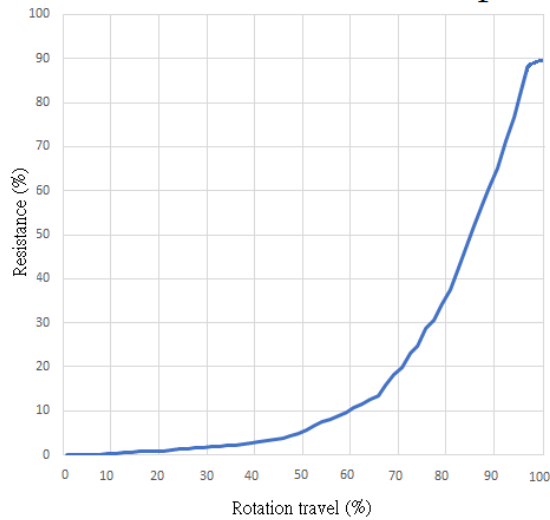
## 47Kohm Resistance Taper



## 100Kohm Resistance Taper



## 250Kohm Resistance Taper



## Shunt Type Stepped Attenuators

### Detent against dB for 15A Resistance Taper

Part Number: SHS100KC15A

Serial Number: \_\_\_\_\_

Tested by: \_\_\_\_\_

Detent	dB	L-R tolerance (%) *	Detent	dB	L-R tolerance (%) *	Detent	dB	L-R tolerance (%) *
1	-0.3	0.	21	-11.6	0.	41	-27.0	0.
2	-0.6	0.	22	-12.1	0.	42	-27.7	0.
3	-1.0	0.	23	-12.7	0.	43	-28.5	0.
4	-1.3	0.	24	-13.4	0.	44	-29.1	0.
5	-1.7	0.	25	-14.2	0.	45	-29.9	0.
6	-2.0	0.	26	-14.8	0.	46	-30.7	0.
7	-2.3	0.	27	-15.6	0.	47	-32.6	0.
8	-2.7	0.	28	-16.3	0.	48	-33.3	0.
9	-3.3	0.	29	-17.7	0.	49	-34.2	0.
10	-3.8	0.	30	-18.7	0.	50	-35.1	0.
11	-4.4	0.	31	-20.1	0.	51	-36.6	0.
12	-4.9	0.	32	-20.8	0.	52	-38.5	0.
13	-5.6	0.	33	-21.6	0.	53	-40.9	0.
14	-6.0	0.	34	-22.4	0.	54	-45.1	0.
15	-6.9	0.	35	-23.1	0.	55	-50.4	0.
16	-7.3	0.	36	-23.9	0.	56	-56.4	0.
17	-8.3	0.	37	-24.7	0.	57	-62.5	0.
18	-8.8	0.	38	-25.6	0.	58	-69.6	0.
19	-9.9	0.	39	-25.9	0.	59	-	0.
20	-11.0	0.	40	-26.6	0.			

\* this value means the tolerances between L channel and R channel by 10V loading in percentage.

#### **Important Warning:**

- a. Do not apply torque more than 3kgf-cm on the product's hex nut, excessive force will damage the product.
- b. Do not unscrew the product. This action is irreversible to the inner mechanic structure.
- c. Noise may be heard after long term usage. Apply oil-based cleaner to the outer gap will solve the problem. Do not disassemble the product.

Remark :

\* Input Resistance can customize from 10Kohm to 250Kohm. We only provide 10K, 24K, 47K, 100K and 250K ohm Resistance Taper(s).

\*\* Only 47K ohm and 100K ohm stepped attenuator within A-B resistor(s). Stereo type within 2pcs A-B resistor(s). Mono type within 1pc A-B resistor(s).

\*\*\* The 15A Resistance Taper for 100Kohm Series Resistor only. Other Resistance Taper(s)

Reference for specification's Resistance Taper.