

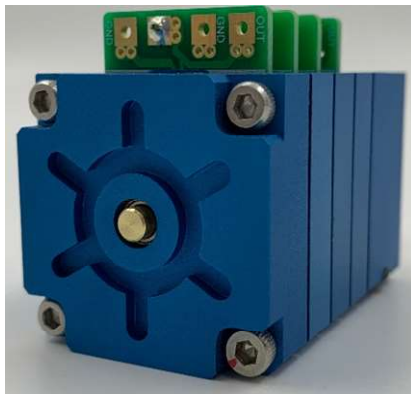
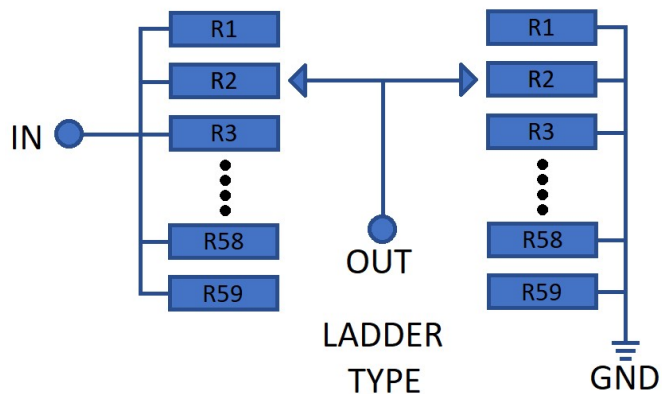
*design by Mr. K*

## 59 Steps Ladder Type Stepped Attenuator High Quality Passive Preamplifiers Metal (1%) Film Resistor (KOA)



### Ladder Type Stepped Attenuators

This attenuator is formed by 2 resistors and 2 switch contacts per step, making up a unique combination of resistors per step. Their function is to add up the impedance of the stepped attenuator. That forms a high quality of voltage divider network. Each resistor set has an equal total series of resistance; therefore, the impedance of the signal source can always be the same.



Detent: 59 steps

Attenuation range: -60dB ... 0dB

Contact material: Hard gold

Mechanical life: > 10 000 cycles

CNC machined AL6063 aluminum

Double grounding design

Indexing angle: 6 degree

Resistance taper: 15A

Bearing: NMB

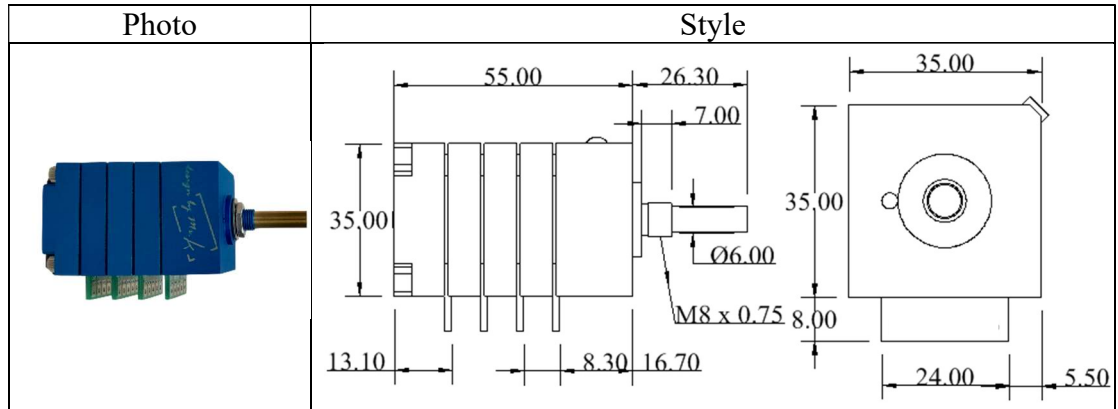
Ingress Protection Rating: IP54

Product Image	Part NO.	Type	Channel	Resistor Value	Resistor Type (Tolerance)	Resistance Taper	Size (L x W x H)
	LDS050K M15A	Ladder	Stereo	50K	Metal (1%)	15A	35mm x 35mm x 55.0mm + (Shaft length 26.3mm)
	LDS100K M15A			100K			
	LDS250K M15A			250K			

## Ladder Type Stepped Attenuators/ Product Dimensions

Dimensions:

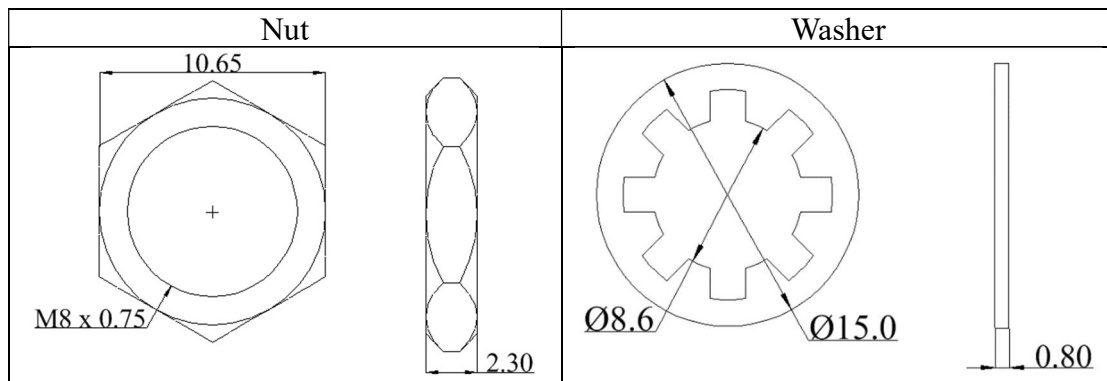
Unit: mm



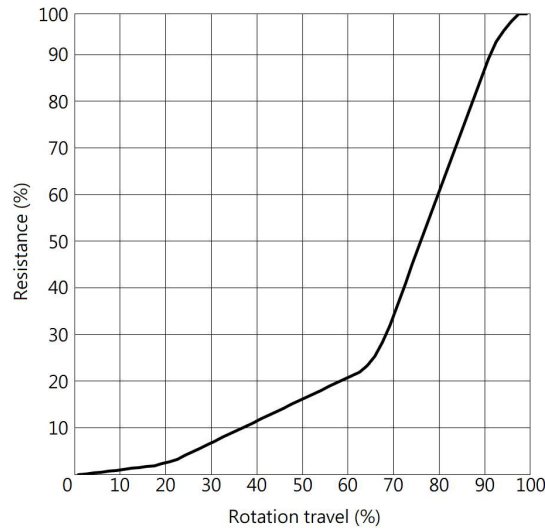
## Ladder Type Stepped Attenuators/ Attached Parts

The following parts are included with the product.

Unit: mm



## Ladder Type Stepped Attenuators/ 15A Resistance Taper



## Ladder Type Stepped Attenuators/ Detent against dB

Part Number: LDS250KM15A

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

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

Detent	dB	L-R tolerance (%) *	Detent	dB	L-R tolerance (%) *	Detent	dB	L-R tolerance (%) *
1	0.0	0.	21	-11.2	0.	41	-22.2	0.
2	-0.1	0.	22	-12.1	0.	42	-23.5	0.
3	-0.3	0.	23	-13.1	0.	43	-24.5	0.
4	-0.6	0.	24	-13.5	0.	44	-25.7	0.
5	-1.0	0.	25	-13.8	0.	45	-27.9	0.
6	-1.6	0.	26	-14.2	0.	46	-28.9	0.
7	-2.0	0.	27	-14.5	0.	47	-31.3	0.
8	-2.5	0.	28	-14.8	0.	48	-32.1	0.
9	-2.8	0.	29	-15.5	0.	49	-33.7	0.
10	-3.4	0.	30	-15.7	0.	50	-34.6	0.
11	-3.9	0.	31	-16.1	0.	51	-35.8	0.
12	-4.4	0.	32	-16.6	0.	52	-36.9	0.
13	-5.1	0.	33	-16.9	0.	53	-38.5	0.
14	-5.8	0.	34	-17.5	0.	54	-42.0	0.
15	-6.2	0.	35	-17.7	0.	55	-43.8	0.
16	-7.0	0.	36	-18.5	0.	56	-48.0	0.
17	-8.0	0.	37	-19.3	0.	57	-53.8	0.
18	-9.1	0.	38	-19.9	0.	58	-59.8	0.
19	-9.8	0.	39	-21.0	0.	59	-	0.
20	-10.6	0.	40	-21.4	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.