

*design by Mr. K*

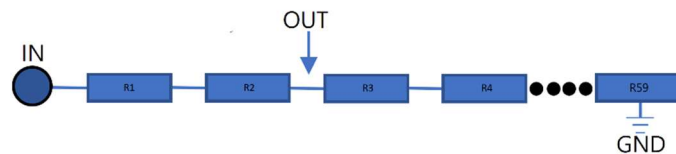
## 59 Steps Series Type Stepped Attenuator High Quality Passive Preamplifiers Metal (1%)/ Carbon (5%) Film Resistor



### Series Type Stepped Attenuators

This attenuator is formed by a series of resistors. They function as a voltage divider. The rotary switch move through the chain as the volume dial is being turned to select the output of the attenuator.

Its principle is like that of a potentiometer. The input impedance of the attenuator remains constant; therefore, the signal source is constant with a non-varying load.



### SERIES TYPE

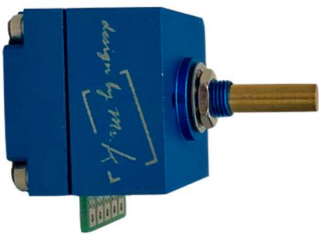
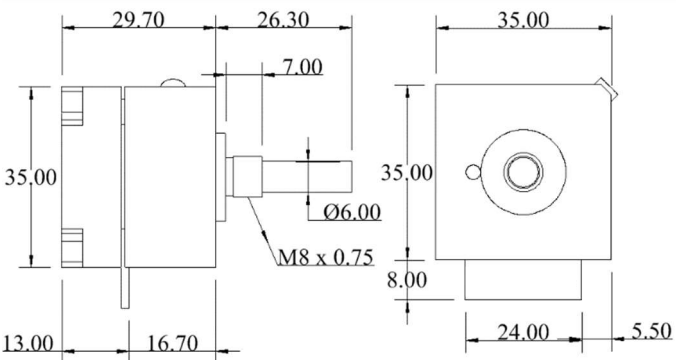
- Detent: Within loudness, 59 steps
- Attenuation range: -60dB ... 0dB
- Contact material: Hard gold
- Mechanical life: > 10 000 cycles
- CNC machined AL6063 aluminum
- Double grounding design
- Indexing angle: 6 degree
- Resistance taper: 15A
- Bearing: NMB
- Ingress Protection Rating: IP54

| Product Image | Part NO.        | Type   | Channel | Resistor Value | Resistor Type (Tolerance) | Resistance Taper | Size (L x W x H)                                      |
|---------------|-----------------|--------|---------|----------------|---------------------------|------------------|---|
|               | SRM050KC<br>15A | Series | Mono    | 50K            | Carbon (5%)               | 15A              | 35mm x 35mm<br>x 29.7mm<br>+ (Shaft length<br>26.3mm) |
|               | SRM050K<br>M15A |        |         |                | Metal (1%)                |                  |   |
|               | SRM100K<br>C15A |        |         | 100K           | Carbon (5%)               |                  |   |
|               | SRM100K<br>M15A |        |         |                | Metal (1%)                |                  |   |

## Series Type Stepped Attenuators/ Product Dimensions

Dimensions:

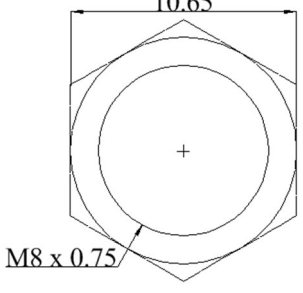
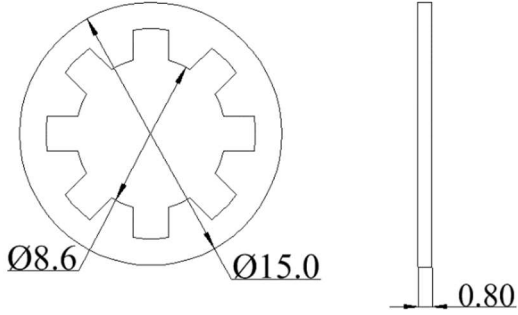
Unit: mm

| Photo   | Style  |
|---|--|
|  |  |

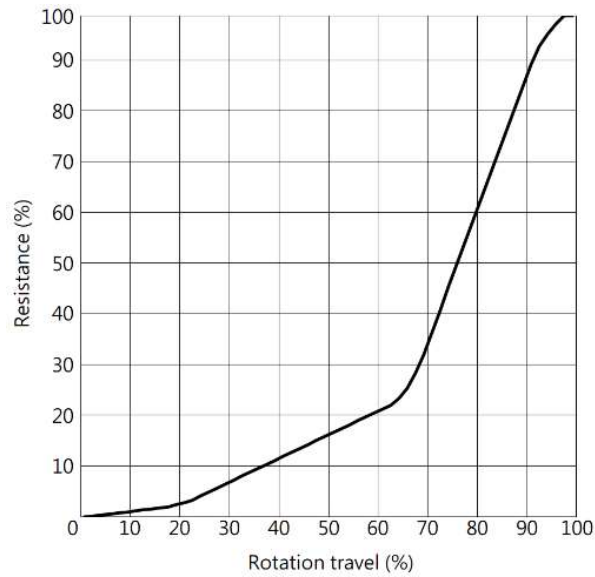
## Series Type Stepped Attenuators/ Attached Parts

The following parts are included with the product.

Unit: mm

| Nut   | Washer   |
|---|--|
|  |  |

## Series Type Stepped Attenuators/ 15A Resistance Taper



## Series Type Stepped Attenuators/ Detent against dB

Part Number: SRM100KC15A

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

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

| Detent | Pass Value  | Measured value* | Detent | Pass Value  | Measured value* | Detent | Pass Value   | Measured value* |
|--------|-------------|-----------------|--------|-------------|-----------------|--------|--------------|-----------------|
| 1      | 100.00      | 100             | 21     | 24.04-27.88 | 2 .             | 41     | 6.874-8.271  | .               |
| 2      | 98.01-98.37 | 98.             | 22     | 22.33-25.99 | 2 .             | 42     | 6.122-7.378  | .               |
| 3      | 95.60-96.37 | 9 .             | 23     | 20.62-24.09 | 2 .             | 43     | 5.370-6.483  | .               |
| 4      | 91.99-93.35 | 9 .             | 24     | 19.85-23.23 | .               | 44     | 4..620-5.587 | .               |
| 5      | 88.41-90.31 | .               | 25     | 19.08-22.36 | .               | 45     | 3.872-4.689  | .               |
| 6      | 83.97-86.49 | 8 .             | 26     | 18.30-21.49 | .               | 46     | 3.124-3.790  | 3.              |
| 7      | 79.57-82.64 | .               | 27     | 17.53-20.62 | .               | 47     | 2.505-3.043  | .               |
| 8      | 75.21-78.75 | 7 .             | 28     | 16.76-19.75 | 1 .             | 48     | 2.077-2.526  | 2.              |
| 9      | 70.89-74.84 | 7 .             | 29     | 16.00-18.87 | 1 .             | 49     | 1.723-2.097  | 1.              |
| 10     | 66.60-70.89 | .               | 30     | 15.23-18.00 | 1 .             | 50     | 1.541-1.876  | 1.              |
| 11     | 62.35-66.92 | 6 .             | 31     | 14.46-17.12 | 1 .             | 51     | 1.360-1.656  | 1.              |
| 12     | 58.13-62.91 | .               | 32     | 13.70-16.24 | 1 .             | 52     | 1.178-1.435  | 1.              |
| 13     | 53.95-58.87 | 5 .             | 33     | 12.94-15.36 | 1 .             | 53     | 0.997-1.215  | .               |
| 14     | 49.80-54.79 | .               | 34     | 12.17-14.48 | 1 .             | 54     | 0.815-0.994  | 0.              |
| 15     | 45.69-50.68 | .               | 35     | 11.41-13.60 | 1 .             | 55     | 0.634-0.773  | 0.              |
| 16     | 41.61-46.54 | 4 .             | 36     | 10.65-12.71 | 1 .             | 56     | 0.453-0.553  | 0.              |
| 17     | 37.56-42.36 | .               | 37     | 9.895-11.83 | .               | 57     | 0.272-0.332  | 0.              |
| 18     | 33.55-38.15 | 3 .             | 38     | 9.138-10.94 | .               | 58     | 0.090-0.110  | 0.              |
| 19     | 29.78-34.13 | .               | 39     | 8.382-10.05 | .               | 59     | 0            | 0               |
| 20     | 26.61-30.70 | .               | 40     | 7.628-9.163 | .               |        |              |                 |

\* this value means the tolerances of the resistor of each step 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.