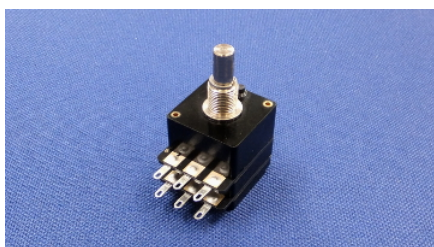


VARIABLE ATTENUATOR



CP2511 Series

Conductive plastic resistor element used (Low rotational noise).

25mm square body.

315 degree operating angle.

Highly dustproof.

Maximum number of interlocking circuits: 8

Last update: 2024.03.15.

[Specifications]

[Note]

[Dimensions]

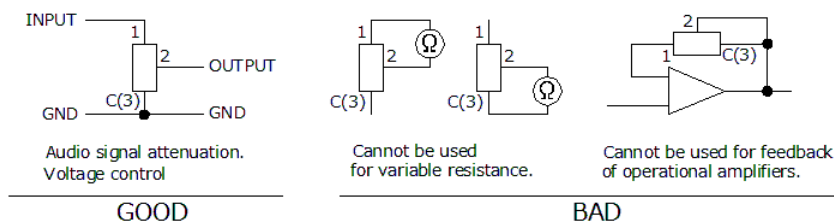
[Model-number]

[Update list]

EU-RoHS

Information

This product is constructed by a ladder circuit. Cannot use it for a rheostat use (Cannot use to change a resistance level).



Specifications

Electrical specifications (initial value)	CP2511 Series																												
Products	*CP2511*~*																												
Attenuation direction [Load: high]	CCW (Large attenuation & cut off) - CW (Small attenuation)																												
	Degrees (CCW to CW)	315	300	285	270	255	240	225	210	195	180	165	150	135	120	105	90	75	60	45	30	15	0						
	Attenuation [dB]	Cut-off	50	42	37	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0						
Circuit method	Ladder circuit																												
Total resistance (1-C)	5kohm, 10kohm, 50kohm, 100kohm																												
Total resistance tolerance	±20%																												
Attenuation accuracy [Load: high]	0 - 10dB: ±1.0dB - 30dB: ±2.0dB - 42dB: ±3.0dB																												
Matching accuracy [Load: High]	0 - 10dB: 1.0dB - 30dB: 1.5dB - 42dB: 2.5dB																												
Insertion loss	0.5dB or less																												
Cut off [15kHz]	85dB Min.																												
Voltage proof	1 Min. at AC500V																												
Insulation resistance	50Mohm or more at DC500V																												
Max rating	0.1W																												
Maximum input voltage	DC30V or less																												

Sliding noise level	47mV or less (by JIS C 6443)
Rotational life	100,000 Cycles Min. (18cycles/min, Sliding noise level: Less than 100mV)

* [Load: high] The output side load should be used with high impedance (20 times or more than the total resistance value).

Mechanical specifications	CP2511 Series
Operating angle	315 degrees ±5 degrees
Rotational torque	0.1 to 1.5Ncm (Different by number of circuit)
Strength Nut-Attached	50Ncm
Attached parts	Hexagonal nut (M9)
Stopper strength	50Ncm
Push-pull strength	50N

General specifications	CP2511 Series
Temperature range	-10 to +70 degrees C (Operating), -15 to +75 degrees C (Storage)
Relative humidity	90%RH (No condensation)

Note

Please check before use.

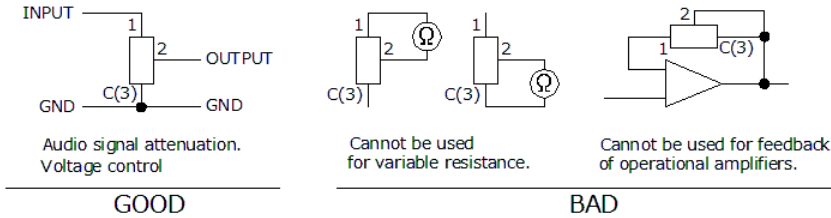
* Solder heat resistance: 350deg C max, 5sec max, 2 times. (Manual soldering only)

* Special order of the shaft length is possible. Please contact us for details.

* It is highly recommended that the fault tolerant system is to be set up in the big situation like the live broadcast.

* Replacing it from other brands tests it enough, and please consider.

* Caution in Ladder circuit use.



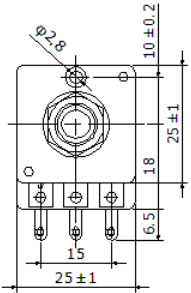
Important points in using audio curve and log curve of TKD faders >> [PDF](#)

* If distortion rate is a concern, consider the potentiometer circuit type.

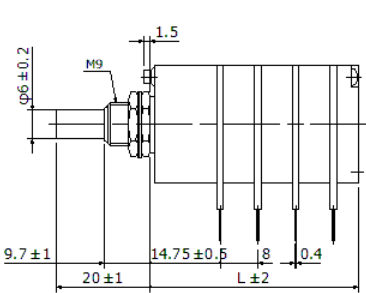
Dimensions

Outline

CP2511 - 4CP2511

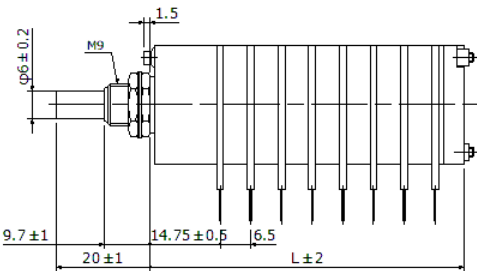


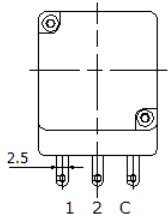
5CP2511 - 8CP2511



Circuits	1	2	3	4
L	20	28	36	44

Circuits	5	6	7	8
L	47	53.5	60	66.5





CP2511
(Single circuit)
STEP

2CP2511
(2 circuits)
STEP

3CP2511
(3 circuits)
STEP

4CP2511
(4 circuits)
STEP

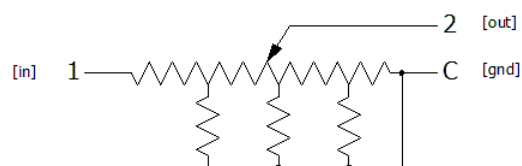
5CP2511
(5 circuits)
STEP

6CP2511
(6 circuits)
STEP

7CP2511
(7 circuits)
STEP

8CP2511
(8 circuits)
STEP

Terminations



Model number

2 CP2511 S - 10K - 6R 22

*1 *2 *3 *4 *5 *6

*1	Number of circuits	Blank : Single circuit 2 to 8 : Number of circuits specified
*2	Product number	CP2511 : CP2511 Series
*3	Mechanical click option	Blank : Without click S : With click (15degrees step)
*4	Total resistance	5K : 5kohm 10K : 10kohm 50K : 50kohm 100K : 100kohm
*5	Shaft types	6R : Φ6 Round Standard
6	Shaft length (Length from mounting surface to shaft end)	20 : 20mm Standard (Only "6R20" can be omitted.) 22 : 22mm 25 : 25mm 30 : 30mm

☐ CP2511-5K

(☐ CP2511-5K-6R20)

*

(Single circuit, Without click, Resistance 5kohm, Round shaft type, Shaft length 20mm)

(* is the standard model)

After selecting each specification, the model number for ordering appears at the top.
(If blank, there is no target model.)

Number of circuits :

Put the number of circuits in after the search.
(Blank for 1 circuit, number for 2 to 8 circuits.)

Mechanical click option :

☒ Without click ☐ With click (15degrees step)

Total resistance value :

☒ 5kohm ☐ 10kohm ☐ 50kohm ☐ 100kohm

Shaft length :

☒ 20mm ☐ 22mm ☐ 25mm ☐ 30mm

Reset

When reloading the browser, please press Reset once.

Custom model number

- [How to specify different output-law in multiple circuits]
- * The number in front of CP2511 is the total number of circuits.
 - * The first output-law specified in the beginning will be the knob side.
 - * Consecutive cases of the same output-law are combined into one. (A10K / A10K >>>> 2-A10K)
 - * If the total resistance is different, specify it separately.
 - * The CP2500 Series cannot be mounted because the angle is different.

[Please refer to the following]

Example	Number of circuits	Output law types	Circuit position	Model number for this specification.
1	4 circuits	Ladder 10kohm x2 Ladder 5kohm x2	top (knob side) bottom	4CP2511 - 2-10K / 2-5K
2	3 circuits	Ladder 10kohm x1 Ladder 100kohm x2	top (knob side) bottom	3CP2511 - 10K / 2-100K
3	3 circuits	Ladder 10kohm x1 Ladder 5kohm x1 Ladder 10kohm x1	top (knob side) center bottom	3CP2511 - 10K / 5K / 10K

Update list

2024.03.15.	Introduction of model number search.
2024.02.28.	Added standard shaft length.
2023.12.19.	Addition of maximum input voltage specification.
2023.03.22.	Additional 3D data (step format).
2022.11.07.	First edition