#### ELECTRICAL

1. Total resistance : 5 kΩ ±30%

2. Rated power : 0.03 W

3. Rated voltage

The rated voltage shall be the voltage of D.C. or A.C. (commercial frequency , effective value ) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following,

however, the maximum working voltage of the following shall be the rated voltage.

 $E = \sqrt{P \cdot R} (V)$ 

E : Rated voltage (V) Where

> : Rated power(dissipation) (W) R: Nominal total resistance ( $\Omega$ )

Maximum working voltage : 50 V A.C. (A.C.Only). 4. Maximun attenuation level 60 dB min. Insertion loss 0.1dB max.

5. Sliding noise : Less than 100 mV measured by method of JIS C 6443.

6. Insulation resistance : Greater than 100 M $\alpha$  measured by D. C. 250V.

7. Withstand voltage: More than 1 minute with an application of A.C. 250 V.

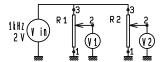
8. Taper

9. Gang error :3 dB max.

to -20dB less than OdB

4 dB max.

to -40dB less than -20dB



#### MECHANICAL

1. Overall rotational angle : 280°±5° 2. Operation torque : 1∼8mN⋅m

3. Shaft end stop strength  $\,:\,$  No damage with an application of 0.3N·m.

4. Starting toruque : 20mN·m MAX.

5. Resistance to soldering heat :

After manual soldering (Less than 350°C and quicker than 3 seconds) there shall be no evidence of poor contact between resistance element and terminals. or any physical damages as a result of the test.

6. Play of shaft

The resistor shall be mounted by soldering the mounting legs on the panel. Then a side thrust of 25mN·m at the end of the shaft shall be applied, then the total play of the shaft shall not exceed  $0.5 \times L / 20 \text{ mm p-p}$ . (I:Shaft length)

7. Inclination of shaft:

The inclination of shaft shall be within 0.35mm to the center of shaft, which is parallel to the mounting surface.

8. Eccentricity of shaft:

The eccentricity of the root of shaft shall not exceed 0.35mm against the center of the mounting position.

10. Robustness of shaft against end thrust :

The shaft shall withstand against end thrust of 50N for 3 seconds.

11. Robustness of shaft against side thrust :

The shaft shall withstand against side thrust of 40N for 3 seconds on the end of the shaft at right angles to the axis of the shaft after mounting the resistor by soldering.

## **ENDURANCE**

1. Rotational life : 10,000 cycles min.

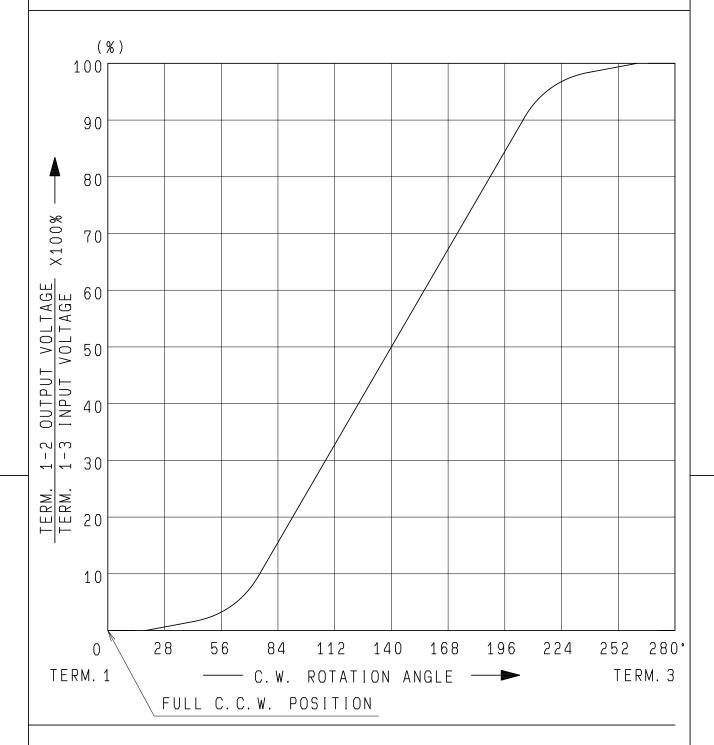
## NOTE

- 1. The items except above mentioned items shall meet or exceed JIS C 6443. 2. Operating temperature :-10 $^{\circ}$  C $^{\sim}$ +70 $^{\circ}$  C, 3. Storage temperature :-30 $^{\circ}$  C $^{\sim}$ +70 $^{\circ}$  C.

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# ALPSALPINE CO.,LTD.



AT 140° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40~60 PERCENT.

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