

Specification sheets

Customer	
Product Name	BRAVES
3296CERMET-CERAMIC TRIMMER POTENTIOMETER	
Model Number	3296W 103

■ Features:

- Higher rated power, thanks to the use of cermet resistor element
- Cut-off structure, offers excellent overall characteristics
- Worm drive, mite adjust
- Excellent reliability for heat and humidity

■ Applications:

- Various type instruments, appliances and power production

1.0 The outline and sizes is showed in fig

2.0 Electrical performance

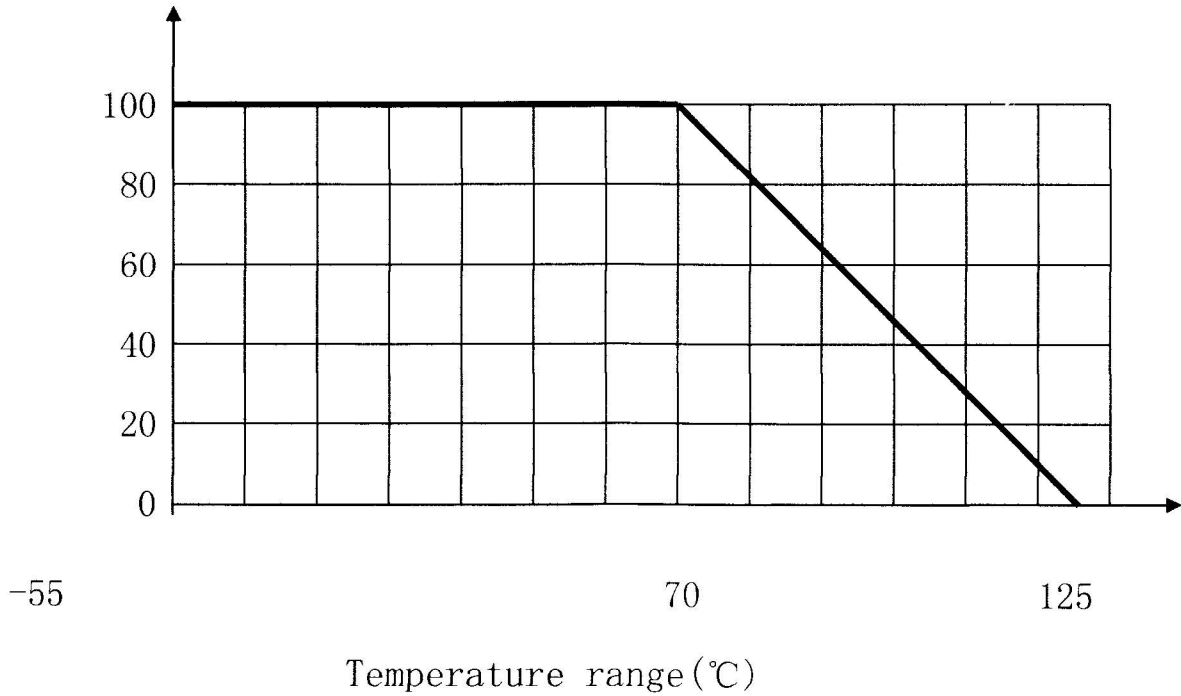
2.1	Range of normal resistance	$10\ \Omega \sim 2M\ \Omega$
2.2	Resistance tolerance	$\pm 10\ \%$
2.3	Resistance taper	B
2.4	Rated power	0.5W
2.5	Contact resistance	$\leq 3\%R$ or $5\ \Omega$
2.6	Resistance temperature coefficient:	$\leq \pm 250 \times 10^{-6} / ^\circ\text{C}$ ($-55^\circ\text{C} \sim +125^\circ\text{C}$)
2.7	Terminal resistance	$\leq 10\ \Omega$ ($100\ \Omega \leq R \leq 1K$) $\leq 1\%R$ ($R > 1K$)
2.8	Rated voltage (DC or AC peak Value)	220V
2.9	Temperature range	$-55^\circ\text{C} \sim +125^\circ\text{C}$
2.10	Mechanical endurance	200 cycles

3.0 Mechanical performance

3.1 Total mechanical (28 ± 2) cycle

3.2 Starting torque $\leq 3.5 \text{ mN.m}$

4.0 Curve of power



5.0 Environmental performance

5.1 Resistance temperature characteristics

First, the specimen shall be allowed to stand in a test chamber of $55^\circ\text{C} \pm 2^\circ\text{C}$ and relative humidity not more than $\pm 20\%$ for (24 ± 4) hours without load. Then the specimen shall be made cool in desiccator with suitable drier and keep it to regulation test.

temperature coefficient $\leq \pm 250 \times 10^{-6} / ^\circ\text{C}$

5.2 Climate category

5.2.1 Dry

The specimen shall be allowed to stand in a test chamber of 70°C for 16 hours. It's exterior shall not be clear damage and mark shall be clear.

5.4 Vibration

The specimen shall be vibrated for two hours on X and Y and Z. Frequency range is (10~500) Hz. Amplitude is 0.75mm. Variation resistance shall be met the following requirement and the specimen shall not have more than 100 μ s electrical interruption:

Variation resistance: less than $\pm(1\%R+0.1\Omega)$

5.5 Eletrical endurance at 70°C

Rated voltage shall be applied in a test chamber of (70°C \pm 3°C) for one hour and 30 minutes and then shall be cut off for 30 minutes. After repeating this cycle for 1000 hours, the total resistance shall be measured at 48 hours, 500 hours and 1000 hours. The following requirement shall be met after the test is completed:

Variation resistance: less than $\pm(3\%R+0.5\Omega)$

Insulation resistance: more than 100M Ω

5.6 Mechanical endurance

The shaft shall be turned at a speed of 5~10 cycles perminute over 90% of the effective rotational angle (total travel). The following requirement shall be met after 200 cycle:

Variation resistance: less than $\pm(10\%R+0.5\Omega)$

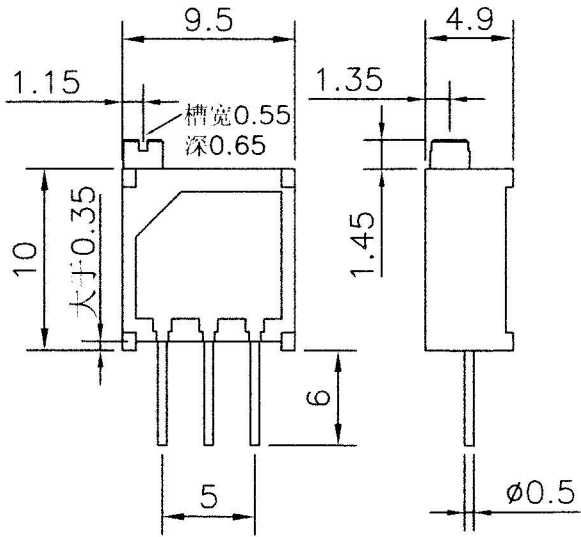
Starting torque: \leq 40mN.m

5.7 Steady damp heat

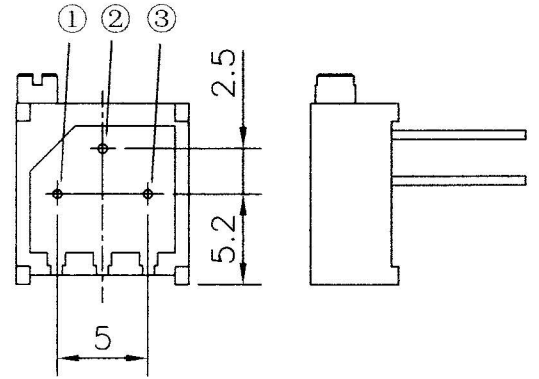
Meet 4.39.2.1 GB/T15298-94. The following requirement shall be met after the test is completed: The specimen exterior haven't clear damage and it's mark shall be clear, variation resistance is less than $\pm(3\%R+0.5\Omega)$, insulation resistance is more than 100M Ω

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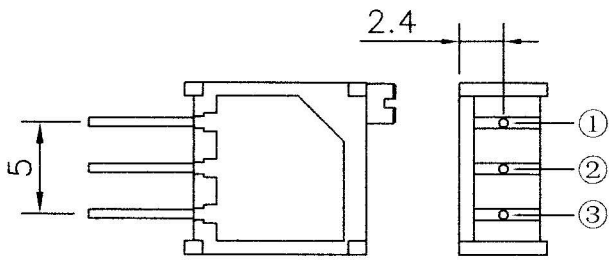
Common Dimensions



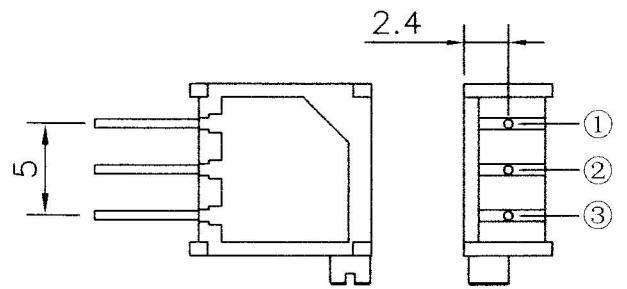
3296P



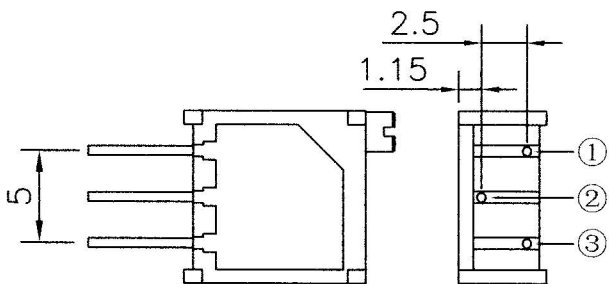
3296W



3296X



3296Y



3296Z

