

## ASZ6038-4026 Aluminum Housed Resistor

Product Name: Aluminum Housed Resistor / Braking Resistor / Pre-charge Resistor/ Break Resistor;

Power Range: 40W-30KW

Resistance Range:  $0.1\Omega \sim 100K\Omega$

Tolerance Range:  $\pm 0.5\% \sim \pm 10\%$

Operation Temp. Range:  $-55^{\circ}\text{C} \sim +275^{\circ}\text{C}$

Feature: high power, fast heat dissipation, anti-vibrative, anti-impact, high stable, long service life.

Function: Braking, pre-charge, testing, starting, dis-charge, etc.

Application: Wind power, photovoltaic, new energy vehicles, inverter, elevator, lifting, CNC, servo, robot and other industrial control automation fields.

### Features & Structure

#### 1. Product features:

High power, fast heat dissipation, high shock resistance, high stability, long service life, can brake frequently and instantaneously, can work for a long time, resistance value will not change too much, product consistency is high.

#### 2. Product structure:

1) The core parts of the resistance core are made of insulating and high temperature resistant materials as the resistance framework, evenly wound with high-quality alloy wires, and sealed with high-quality and high thermal conductivity organic quartz sand, so that the metal aluminum shell and the core parts of the resistance are closely combined into a solid entity, free from the influence of external air and dust, It has high stability and thermal conductivity.

2) The aluminum shell is made of high-quality industrial 6063 aluminum, and the surface is treated with high-temperature anodizing silver mist or bright silver to achieve better appearance and insulation heat dissipation effect.

3) According to the resistance to bear different current size, the leading end is connected with high-quality high-temperature braided wire (no fuzzing, no allergy) or copper guide, stainless steel guide, which is convenient for customers to connect at will.

4) We have 46 aluminum shell models of different styles to facilitate customer selection; Can accept a variety of non-standard customization, all-round to meet customer needs.

#### 3. Application fields:

Inverter, servo motor, servo driver, power load, elevator, lifting, medium frequency furnace, electric furnace, induction heating equipment industry, new energy vehicle manufacturing, wind power pitch system, wind power electronic control system and converter, solar photovoltaic inverter industry, small and medium-sized wind turbine (including grid connected / off grid type), medical equipment Machinery industry (such as paper machine), communication industry, rail transit, railway locomotive, power system, fan load, mining equipment, transformer, CNC machine tool, reactive power compensation device, laser industry, aviation, shipbuilding, military industry, State Grid, engineering supporting, major universities

and design and research institutes.

• **Technical Parameters**

Test item	Test condition	Specifications
Resistance tolerance	JIS-C-5202 5-1	Resistance Nominal Tolerance $1 \leq R$ $1 > R \pm 5\%(J) \pm 10\%(K)$
Temperature coefficient	JIS-C-5202 5-2	$\pm 250\text{PPM}/^\circ\text{C}$ Max
Power rating load	JIS-C-5202 5-4 $40^\circ\text{C}$ , power rating 1H	$\Delta R \leq \pm(1\% + 0.1\Omega)$ Surface temperature up $\leq 350^\circ\text{C}$ MAX
Short-term overload	JIS-C-5202 5-5, 500% rated power 5 seconds	Free or appearance or structural irregularity $\Delta R \leq \pm(2\% + 0.1\Omega)$
Insulation resistance	JIS-C-5202 5-6 1000V DC	100 M $\Omega$ Min
Dielectric withstanding voltage	JIS-C-5202 5-7, 2000V DC 1 minute	Free or appearance or structural irregularity $\Delta R/R \leq \pm(0.1\% + 0.05\Omega)$
Terminal strength	JIS-C-5202 6-1 ASZ 8kg 30s, ASCB / ASC 5kg 10s	Free of appearance or structural irregularity
Resistor strength	JIS-C-5202 6-2 ASZ 30kg 30s, ASCB / ASC 10kg 10s	Free of appearance or structural irregularity
Vibration	JIS-C-5202 6-3 1.5mm, 10-50-10Hz/min X-Y-Z 2 hours each	Free or appearance or structural irregularity Surface coating crack $\Delta R \leq \pm(1\% + 0.05\Omega)$
Thermal shock	JIS-C-5202 7-3 Room temp 30 minutes ON- $55^\circ\text{C}$ 15 minutes OFF	Resistor free of structural irregularity crack of silicon cement surface $\Delta R \leq \pm(2\% + 0.1\Omega)$
Humidity	JIS-C-5202 7-5, $40^\circ\text{C}$ 90%RH 240H	Free or appearance or structural irregularity Surface coating crack $\Delta R/R \leq \pm(3\% + 0.1\Omega)$
Load life	JIS-C-5202 7-10, 90Min ON-30Minutes OFF 500H	Free of appearance or structural irregularity Discoloration of marking $\Delta R \leq \pm(3\% + 0.1\Omega)$