

Aluminum Encased Wirewound Power Resistors, Braking Resistors

TYPE1: ASZ Series
TYPE2: ASC Series
TYPE3: ASCB Series



Power rating: 40W-3000W

Resistance value: 0.01 Ω -100K Ω

Resistance tolerance: $\pm 0.1\%$, $\pm 0.5\%$, $\pm 1\%$, $\pm 5\%$, $\pm 10\%$

● Construction:

1. An aluminum encased consists of an alloy metal coil-type resistance element assembled into an aluminum enclosure.
2. Following high-temperature anodization, the enclosure is filled with a special non-flammable cement paste and after hardening. Insulation is applied through a high temperature process.
3. Since this component is embedded in the heat-proof cement, it is not affected by external mechanical force, and dusty environments and extreme duty.

● Features:

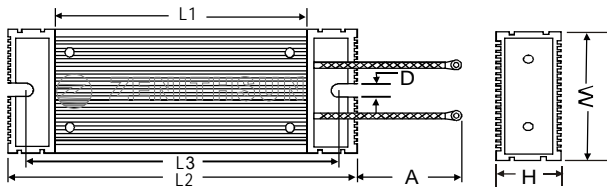
1. Durable, vibration-proof, dissipates heat well and low temperature coefficient with resistance varying in direct proportion.
2. ASZ series successfully applied for national patent (ZL2004300866567)
3. Specification: 80W60R, 80W100R, 80W20R, 100W20R, 100W100R, 120W68R, 150W20R, 200W20R, 200W200R, 300W20R, 300W150R, 300W200R, 400W150R, 400W20R, 500W100R, 500W20R, 800W75R, 1040W50R, 1040W75R ect.
4. For non-standard technical requirements and custom special applications, please contact us to discuss the details.
5. Delivery: 5-7 days
6. Conforms to the ROHS standard and the LEAD-FREE non-lead standard

● Applications:

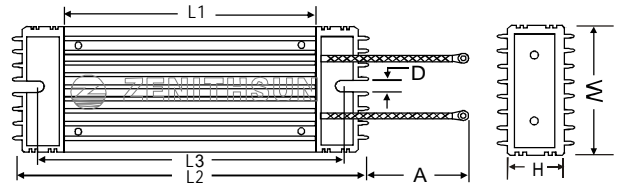
The product is easy to utilize and install, and suitable for a wide range applications. Applications include industrial machinery, load testing, electric power distribution, instruments, and automated control installations.

● Dimensions

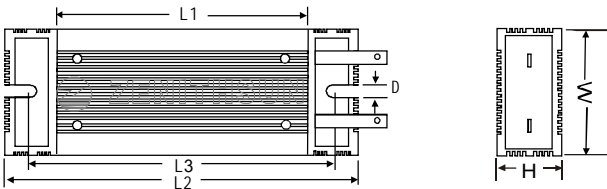
Type:ASZ 6030 & 4020



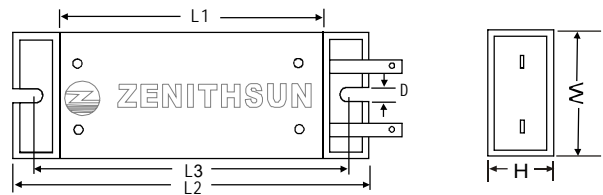
Type:ASZ 6038 & 4026



Type:ASZ 7045



Type:ASZ 7644

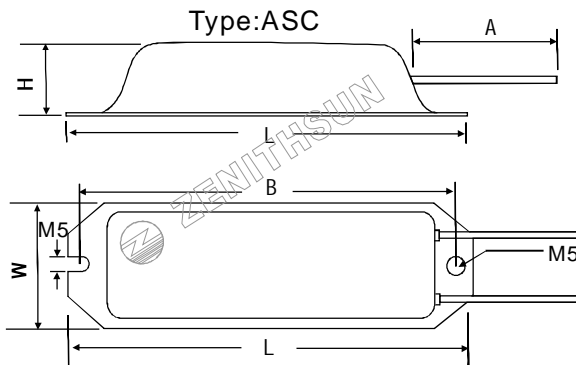


| POWER RATING | DIMENSIONS (mm) | | | | | | |
|--------------|-----------------|-----|------|------|------|-------|------|
| | W±1 | H±1 | L1±2 | L2±2 | L3±2 | D±0.5 | A±10 |
| 40W | 40 | 20 | 60 | 90 | 75 | 5.2 | 300 |
| 60W | 40 | 20 | 85 | 115 | 100 | 5.2 | 300 |
| 80W | 40 | 20 | 115 | 140 | 125 | 5.2 | 300 |
| 100W | 40 | 20 | 115 | 140 | 125 | 5.2 | 300 |
| 120W | 40 | 20 | 155 | 185 | 170 | 5.2 | 300 |
| 150W | 40 | 20 | 155 | 185 | 170 | 5.2 | 300 |
| 200W | 60 | 30 | 130 | 165 | 150 | 5.2 | 300 |
| 250W | 60 | 30 | 130 | 165 | 150 | 5.2 | 300 |
| 300W | 60 | 30 | 180 | 215 | 200 | 5.2 | 300 |
| 400W | 60 | 30 | 230 | 265 | 250 | 5.2 | 300 |
| 500W | 60 | 30 | 300 | 335 | 320 | 5.2 | 300 |
| 600W | 60 | 30 | 300 | 335 | 320 | 5.2 | 300 |
| 800W | 60 | 30 | 330 | 365 | 350 | 5.2 | 300 |
| 1000W | 70 | 45 | 300 | 335 | 320 | 5.2 | 300 |
| 1200W | 70 | 45 | 365 | 400 | 385 | 5.2 | \ |
| 1500W | 70 | 45 | 415 | 450 | 435 | 5.2 | \ |
| 2000W | 70 | 45 | 465 | 500 | 485 | 5.2 | \ |
| 2500W | 70 | 45 | 515 | 550 | 535 | 5.2 | \ |
| 3000W | 70 | 45 | 565 | 600 | 585 | 5.2 | \ |

| POWER RATING | DIMENSIONS (mm) | | | | | | |
|--------------|-----------------|-----|------|------|------|-------|------|
| | W±1 | H±1 | L1±2 | L2±2 | L3±2 | D±0.5 | A±10 |
| 40W | 40 | 26 | 60 | 90 | 75 | 5.2 | 300 |
| 60W | 40 | 26 | 85 | 115 | 100 | 5.2 | 300 |
| 80W | 40 | 26 | 115 | 140 | 125 | 5.2 | 300 |
| 100W | 40 | 26 | 115 | 140 | 125 | 5.2 | 300 |
| 120W | 40 | 26 | 155 | 185 | 170 | 5.2 | 300 |
| 150W | 40 | 26 | 155 | 185 | 170 | 5.2 | 300 |
| 200W | 60 | 38 | 130 | 165 | 150 | 5.2 | 300 |
| 250W | 60 | 38 | 130 | 165 | 150 | 5.2 | 300 |
| 300W | 60 | 38 | 180 | 215 | 200 | 5.2 | 300 |
| 400W | 60 | 38 | 230 | 265 | 250 | 5.2 | 300 |
| 500W | 60 | 38 | 300 | 335 | 320 | 5.2 | 300 |
| 600W | 60 | 38 | 300 | 335 | 320 | 5.2 | 300 |
| 800W | 60 | 38 | 330 | 365 | 350 | 5.2 | 300 |
| 1000W | 76 | 44 | 300 | 335 | 320 | 5.2 | 300 |
| 1200W | 76 | 44 | 365 | 400 | 385 | 5.2 | \ |
| 1500W | 76 | 44 | 415 | 450 | 435 | 5.2 | \ |
| 2000W | 76 | 44 | 465 | 500 | 485 | 5.2 | \ |
| 2500W | 76 | 44 | 515 | 550 | 535 | 5.2 | \ |
| 3000W | 76 | 44 | 565 | 600 | 585 | 5.2 | \ |

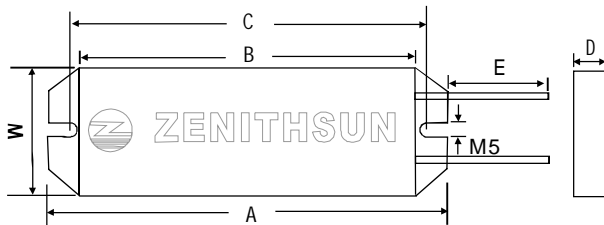
We can do the resistors following customer special requirement.

● Dimensions



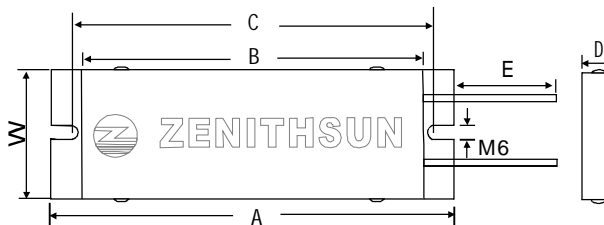
| POWER RATING | DIMENSIONS (mm) | | | | | RESISTANCE |
|--------------|-----------------|----|----|-----|-----|-------------|
| | L | W | H | B | A | |
| 60W | 100 | 30 | 13 | 90 | 100 | 0.01Ω-100KΩ |
| 80W | 130 | 42 | 19 | 116 | 100 | 0.01Ω-100KΩ |
| 100W | 130 | 42 | 19 | 116 | 100 | 0.01Ω-100KΩ |
| 120W | 130 | 42 | 19 | 116 | 100 | 0.01Ω-100KΩ |
| 120W | 182 | 42 | 19 | 172 | 100 | 0.01Ω-100KΩ |

Type:ASCB-A 60W-150W



| POWER RATING | DIMENSIONS (mm) | | | | | | RESISTANCE |
|--------------|-----------------|-----|-----|------|-------|-----|---------------|
| | A | B | C | D | W | E | |
| 60W | 100 | 70 | 85 | 8 | 45 | 100 | 0.1 Ω - 10K Ω |
| 60W | 120 | 90 | 105 | 9.5 | 35 | 100 | 0.1 Ω - 10K Ω |
| 80W | 120 | 95 | 105 | 8 | 45 | 100 | 0.1 Ω - 10K Ω |
| 100W | 120 | 95 | 105 | 8 | 45 | 100 | 0.1 Ω - 10K Ω |
| 120W | 150 | 125 | 135 | 8 | 45 | 100 | 0.1 Ω - 10K Ω |
| 150W | 215 | 190 | 200 | 8 | 45 | 100 | 0.1 Ω - 10K Ω |
| 200W | 265 | 240 | 250 | 8/12 | 45/40 | 100 | 0.1 Ω - 10K Ω |

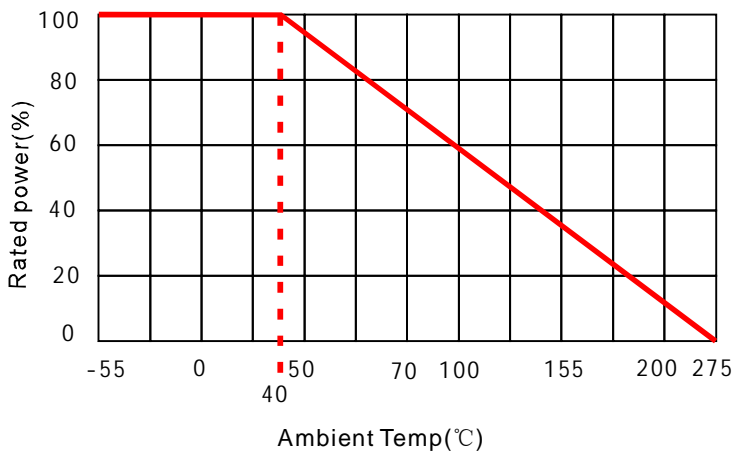
Type:ASCB-B 200W-8000W



NOTE: 1. Max rating is 8000W

2. Above 200W, we can follow customer special requirement

● Derating



● Performance Specifications

| Test item | Test condition | Specifications |
|---------------------------------|--|--|
| Resistance tolerance | JIS-C-5202 5-1 | Resistance Nominal Tolerance $1 \leq R < 10 \text{K}$ $\pm 5\%$ (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°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 5seconds | Free of appearance or structural irregularity $\Delta R \leq \pm(2\% + 0.1\Omega)$ |
| Insulation resistance | JIS-C-5202 5-6 1000V DC | 100 M Ω Min |
| Dielectric withstanding voltage | JIS-C-5202 5-7 2000V DC 1 minute | Free of 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 2hours each | Free of 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°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°C 90%RH 240H | Free of 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 $\Delta R \leq \pm(3\% + 0.1\Omega)$ |

● How to order

| ASZ | 1000W | 50R | J | N |
|------------|-----------------|------------------------------|-----------------|---------------|
| Type | Rated Power (w) | Resistance Value(Ω) | Tolerance(%) | Induction |
| ASZ 6030 | 200W-800W | 0.01 Ω -100K Ω | B = $\pm 0.1\%$ | Non-inductive |
| 6038 | 200W-800W | 0.01 Ω -100K Ω | D = $\pm 0.5\%$ | |
| 4020 | 40W-150W | 0.01 Ω -100K Ω | F = $\pm 1\%$ | |
| 4026 | 40W-150W | 0.01 Ω -100K Ω | J = $\pm 5\%$ | |
| 3020 | 40W-100W | 0.01 Ω -100K Ω | K = $\pm 10\%$ | |
| 4012 | 40W-200W | 0.01 Ω -20K Ω | | |
| 7045 | 1000W-3000W | 0.01 Ω -20K Ω | | |
| 7644 | 1000W-3000W | 0.01 Ω -20K Ω | | |
| ASCB A4508 | 60W-200W | 0.01 Ω -10K Ω | | |
| B | 200W-8000W | 0.01 Ω -10K Ω | | |
| ASC | 60W-120W | 0.01 Ω -100K Ω | | |