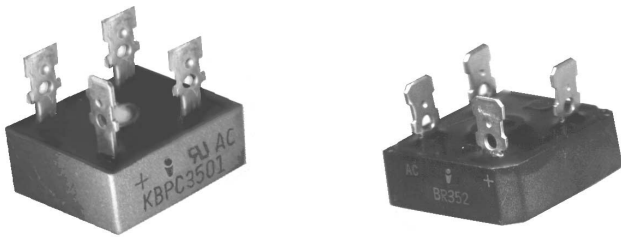




KBPC3500 / BR350 SERIES

35 AMPERE SINGLE-PHASE SILICON BRIDGE RECTIFIER



FEATURES

- High efficiency
- Surge overload rating - 400 amperes peak
- Body clad with metal (electrically isolated) or plastic
- Plastic encapsulation has Underwriters
- Laboratory flammability classification 94V-0
- Universal multi-purpose terminals

MECHANICAL DATA

Case : Metal or Plastic shell with plastic encapsulation

Terminals : 1/4 inch, 6.35mm Faston blades*

Polarity : Positive symbol printed on body

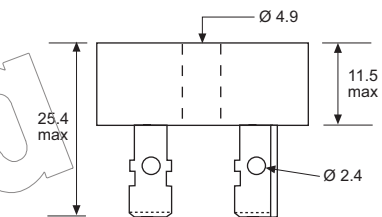
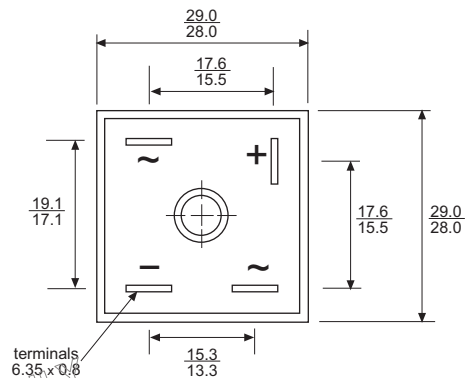
Weight : 1.1 ounce, 31.6 grams

VOLTAGE RANGE

50 to 1000 Volts PRV

CURRENT

35 Amperes



Dimensions in millimetres

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| | | Metal Case | KBPC35005 | KBPC3501 | KBPC3502 | KBPC3504 | KBPC3506 | KBPC3508 | KBPC3510 | |
|---|------------------|--------------|---------------|----------|----------|----------|----------|----------|----------|----------|
| | | Plastic Case | BR3505 | BR351 | BR352 | BR354 | BR356 | BR358 | BR3510 | |
| Maximum Recurrent Peak Reverse Voltage | VRRM | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Bridge Input Voltage RMS | VRMS | | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | VDC | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current at T _c = 55 °C (see Fig 2) | IF(AV) | | 35.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine - wave superimposed on rated load (see Fig 1) | IFSM | | 400 | | | | | | | A |
| Maximum Forward Voltage Drop per Element at 17.5A (see Fig 3) | VF | | 1.2 | | | | | | | V |
| Maximum Reverse Current at Rated DC Blocking Voltage per Element (see Fig 4) T _A = 25°C T _A = 100°C | IR | | 10.0 1.0 | | | | | | | µA mA |
| RMS Isolation Voltage from Case to Terminals | VISO | | 2500 | | | | | | | V |
| Typical Thermal Resistance | R _{θJC} | | 2.0 | | | | | | | °C/w |
| Operating Temperature Range | T _J | | - 55 to + 125 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | | - 55 to + 150 | | | | | | | °C |

* Lead out wires can be supplied as an alternative to blades - add suffix W to part number e.g. KBPC3506W

RATING AND CHARACTERISTIC CURVES KBPC3500/BR350 SERIES

FIG 1 : MAXIMUM NON-REPETITIVE SURGE CURRENT PER ELEMENT

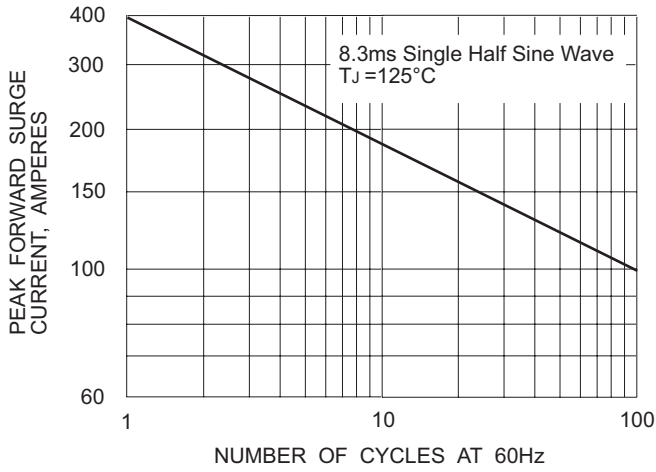


FIG 2 : DERATING CURVE FOR RECTIFIED OUTPUT CURRENT

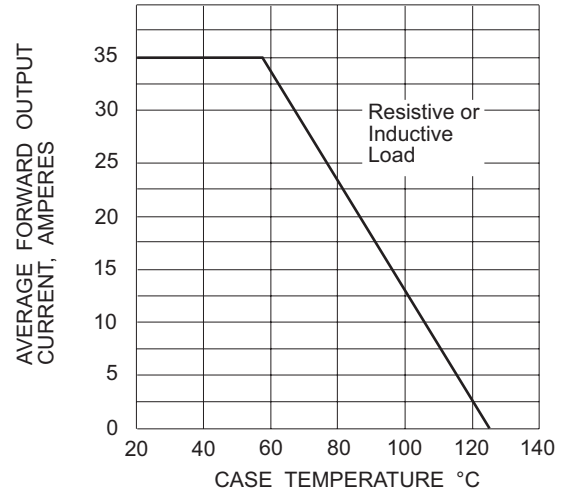


FIG 3 : TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

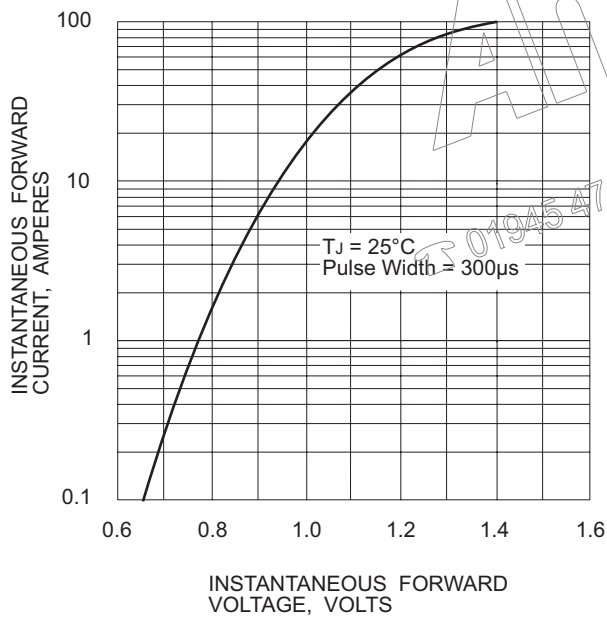


FIG 4 : TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

