



Silicon Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts

Forward Current - 25 Amperes

Features

- Low forward voltage drop
- Electrically isolated base -2000 Volts
- High surge forward current capability
- Materials used carries U/L recognition

Mechanical Data

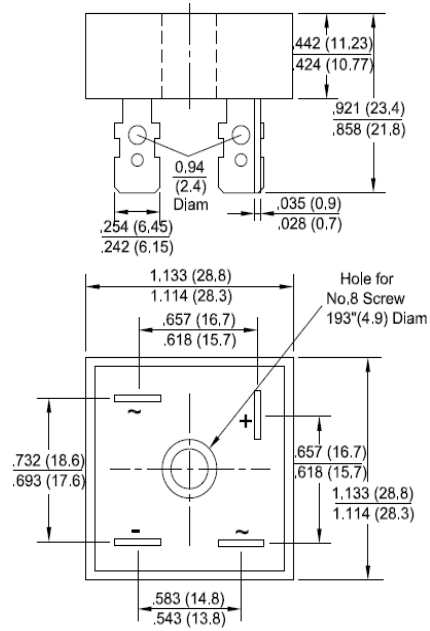
- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

- General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc.

KBPC



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

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

| Characteristics | Symbol | KBPC | KBPC | KBPC | KBPC | KBPC | KBPC | KBPC | Unit |
|--|------------------|-------------|------|------|------|------|------|------|------------------|
| | | 25005 | 2501 | 2502 | 2504 | 2506 | 2508 | 2510 | |
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum Average Forward Rectified Current @T _c =55 °C | I(AV) | 25 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 400 | | | | | | | A |
| I ² t Rating for Fusing (t<8.3mS) | I ² t | 664 | | | | | | | A ² s |
| Peak Forward Voltage per Diode at 12.5A DC | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @T _J =25°C | I _R | 10 | | | | | | | µA |
| Operating Junction Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |



Fig. 1 - Forward Current Derating Curve

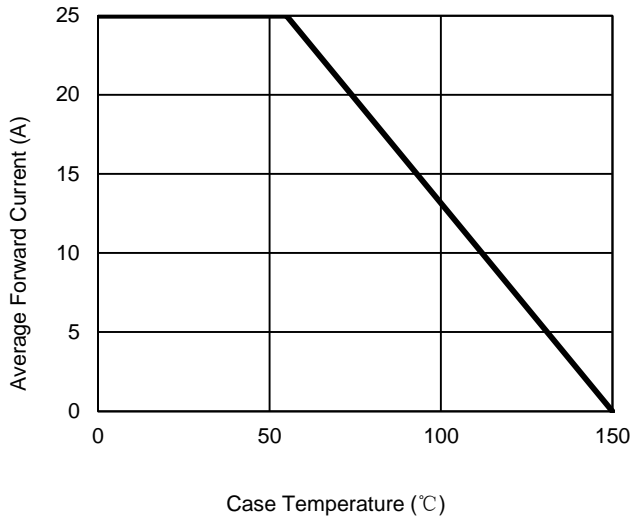


Fig. 2 - Maximum Non-Repetitive Surge Current

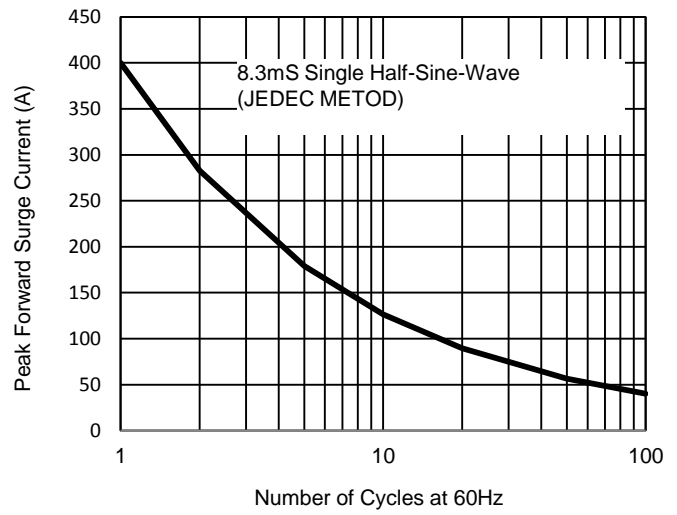


Fig. 3 - Typical Reverse Characteristics

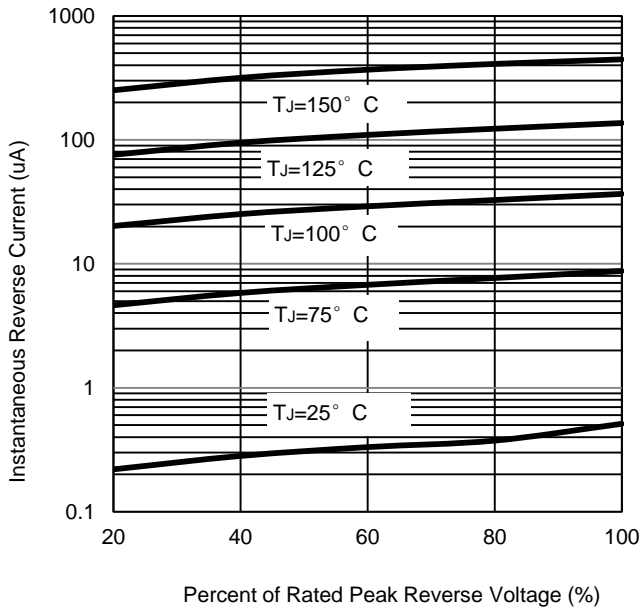
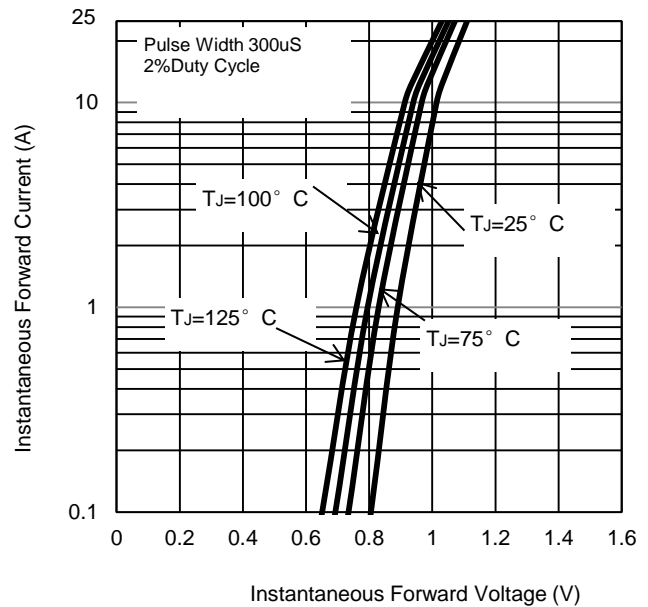


Fig. 4 - Typical Forward Characteristics





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