

## Silicon Passivated 3 Phase Bridge Rectifiers

Reverse Voltage - 800 to 1600Volts

Forward Current - 35 Amperes

### Features

- Low forward voltage drop
- High current capability
- High reliability

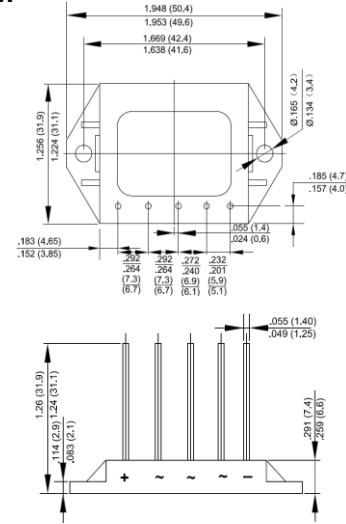
### Mechanical Data

- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Mounting position:
- Mounting torque: 2 N.m

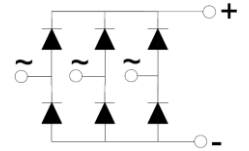
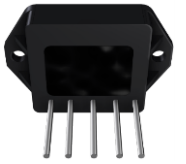
### Applications

- For use in high power supply inverters, servo motor and welding machine applications

### SMTW



RoHS  
COMPLIANT



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            | SMT35<br>-08W | SMT35<br>-10W | SMT35<br>-12W | SMT35<br>-14W | SMT35<br>-16W | Unit             |
|----------------------------------------------------------------------------------------------------|-------------------|---------------|---------------|---------------|---------------|---------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                            | V <sub>RRM</sub>  | 800           | 1000          | 1200          | 1400          | 1600          | V                |
| Maximum RMS Voltage                                                                                | V <sub>RMS</sub>  | 560           | 700           | 840           | 980           | 1120          | V                |
| Maximum DC Blocking Voltage                                                                        | V <sub>DC</sub>   | 800           | 1000          | 1200          | 1400          | 1600          | V                |
| Peak Non-Repetitive Reverse Voltage                                                                | V <sub>RSM</sub>  | 900           | 1100          | 1300          | 1500          | 1700          | V                |
| Maximum Average Forward Rectified Current @T <sub>c</sub> =55 °C                                   | I <sub>(AV)</sub> | 35            |               |               |               |               | A                |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I <sub>FSM</sub>  | 420           |               |               |               |               | A                |
| I <sup>2</sup> t Rating for Fusing (t<8.3mS)                                                       | I <sup>2</sup> t  | 732           |               |               |               |               | A <sup>2</sup> S |
| Peak Forward Voltage per Diode at 17.5A DC                                                         | V <sub>F</sub>    | 1.2           |               |               |               |               | V                |
| Maximum DC Reverse Current at Rated @T <sub>j</sub> =25°C                                          | I <sub>R</sub>    | 5             |               |               |               |               | µA               |
| DC Blocking Voltage per Diode @T <sub>j</sub> =125°C                                               |                   | 3             |               |               |               |               | mA               |
| RMS Isolation Voltage from Case to Lead                                                            | V <sub>ISO</sub>  | 2500          |               |               |               |               | V                |
| Operating Junction Temperature Range                                                               | T <sub>j</sub>    | -55 to +150   |               |               |               |               | °C               |
| Storage Temperature Range                                                                          | T <sub>STG</sub>  | -55 to +125   |               |               |               |               | °C               |

SMT35\*W-B-00/99/92-00/01

Rev. 9, 22-Apr-2019

Fig. 1 - Forward Current Derating Curve

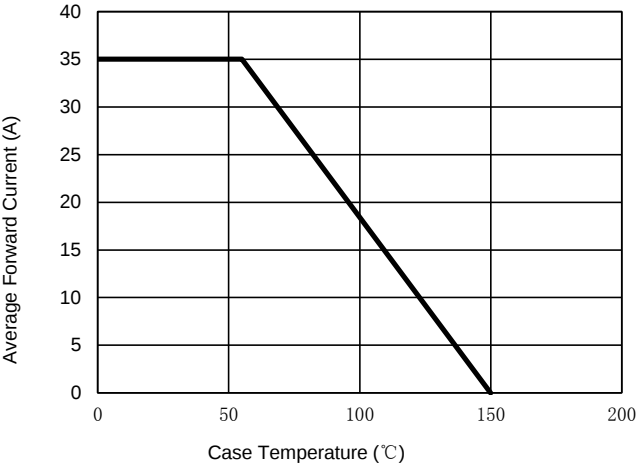


Fig. 2 - Maximum Non-Repetitive Surge Current

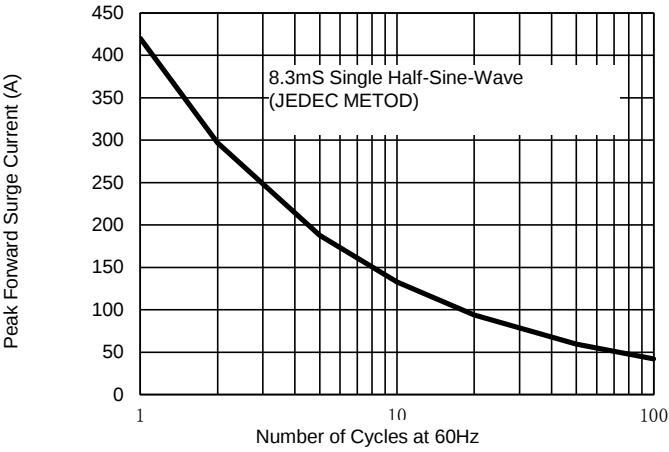


Fig. 3 - Typical Reverse Characteristics

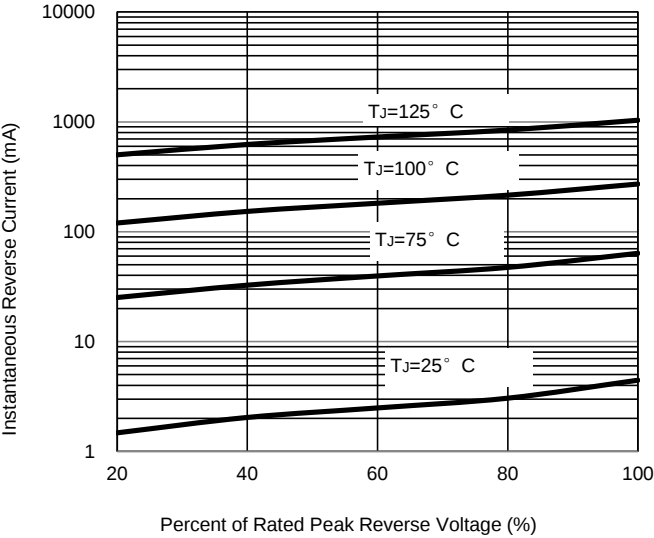
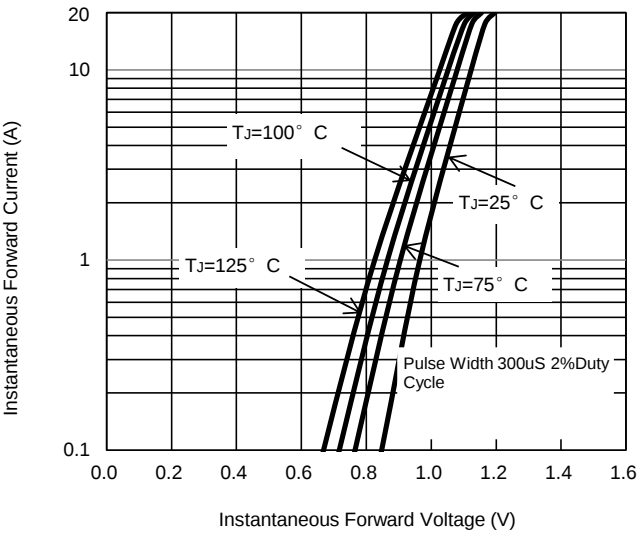


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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