

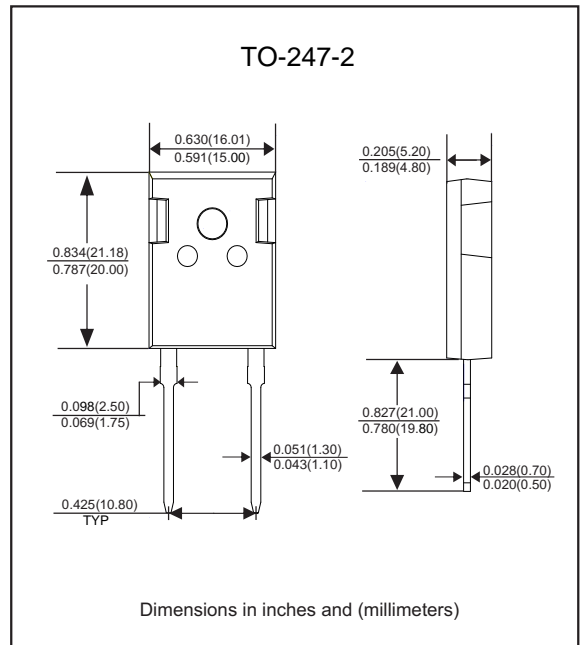
Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power losses
- Glass passivated chip junction
- Suffix "H" indicates Halogen-free parts

Mechanical data

- Case: TO-247-2
- Molding compound meets UL94 V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

Package outline



Maximum ratings (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | GS90160P | Unit |
|--|-------------------------|-------------|------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 1600 | V |
| Maximum RMS voltage | V_{RMS} | 1120 | V |
| Maximum DC blocking voltage | V_{DC} | 1600 | V |
| Average forward current at $T_C=100^\circ\text{C}$ | $I_{F(AV)}$ | 90 | A |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 500 | A |
| Maximum forward voltage @ $I_F=90\text{A}$ | V_F | 1.21 | V |
| Maximum DC reverse current at rated DC blocking voltage | $T_j=25^\circ\text{C}$ | 0.1 | mA |
| | $T_j=150^\circ\text{C}$ | 1 | mA |
| Operating junction and storage temperature range | T_j, T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Rating and characteristic curves

Fig.1 Forward Current Derating Curve

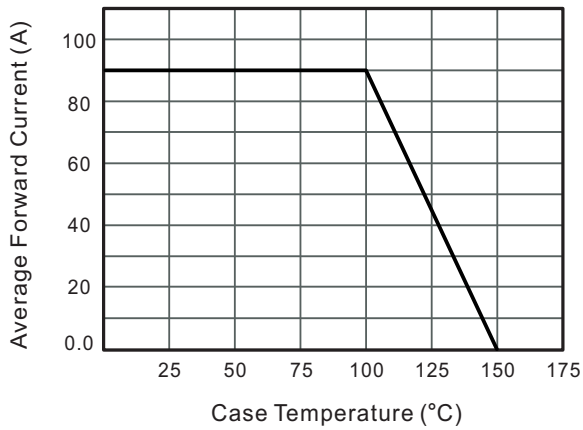


Fig.2 Typical Instantaneous Reverse Characteristics

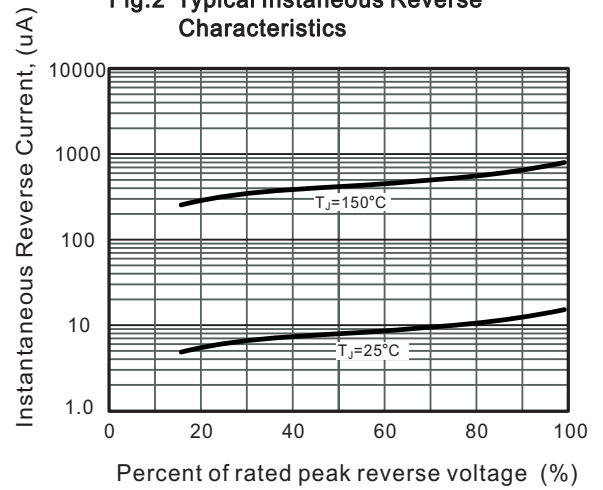


Fig.3 Typical Forward Characteristic

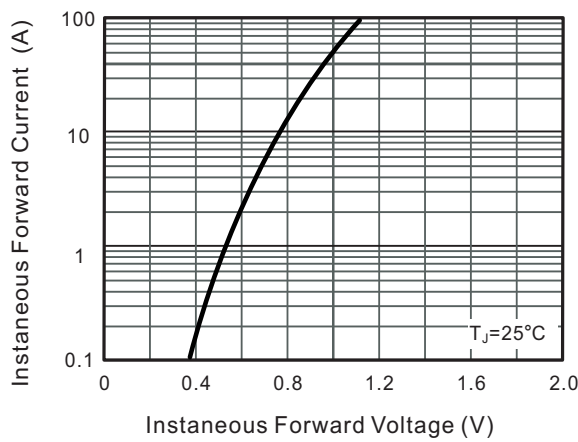
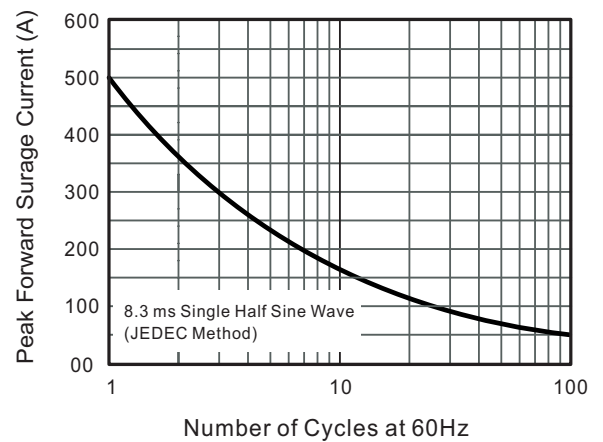
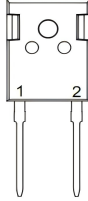
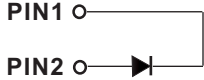


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



Pinning information

| Pin | Simplified outline | Symbol |
|----------------------------|---|---|
| Pin1 cathode Pin2 anode |  |  |

Marking

| Type number | Marking code |
|-------------|--------------|
| GS90160P | GS90160P |