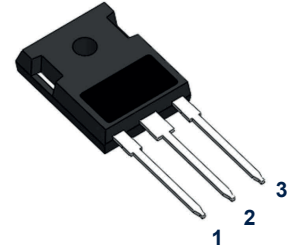


Features

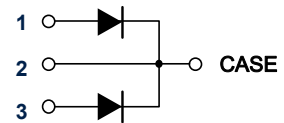
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Low reverse leakage current
- High surge capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2011/65/EU



TO-247AB

Mechanical Data

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting position: Any



Schematic Diagram

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

| Parameter | | Symbol | Value | Unit |
|--|-------------------------|-----------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | | V_{RRM} | 600 | V |
| Maximum RMS Voltage | | V_{RMS} | 420 | V |
| Maximum DC Blocking Voltage | | V_{DC} | 600 | V |
| Maximum Average Forward Rectified Current (see Fig.1) | Per leg | $I_{(AV)}$ | 15 | A |
| | Total device | | 30 | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | | I_{FSM} | 275 | A |
| Maximum Instantaneous Forward Voltage at 15.0A Per leg ¹ | | V_F | 1.7 | V |
| Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹ | $T_A=25^\circ\text{C}$ | I_R | 5 | uA |
| | $T_A=125^\circ\text{C}$ | | 50 | |
| Maximum Reverse Recovery Time ² | | t_{rr} | 50 | nS |
| Typical Thermal Resistance ³ | | $R_{\theta JC}$ | 1.0 | °C/W |
| Operating Junction Temperature Range | | T_J | -55 to +150 | °C |
| Storage Temperature Range | | T_{STG} | -55 to +150 | °C |

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle.
2. Reverse recovery test conditions $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.
3. Thermal resistance from junction to case.

Ratings and Characteristic Curves

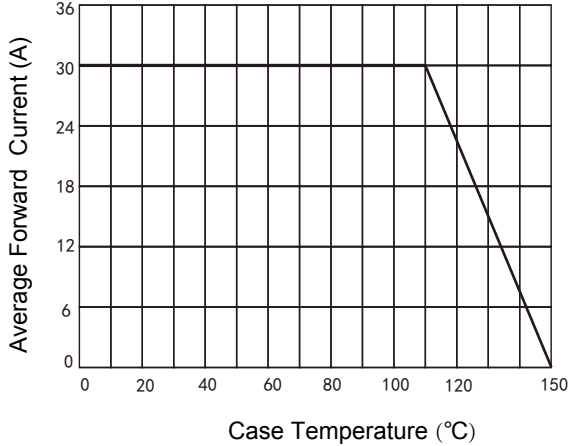


Figure 1. Forward Current Derating Curve

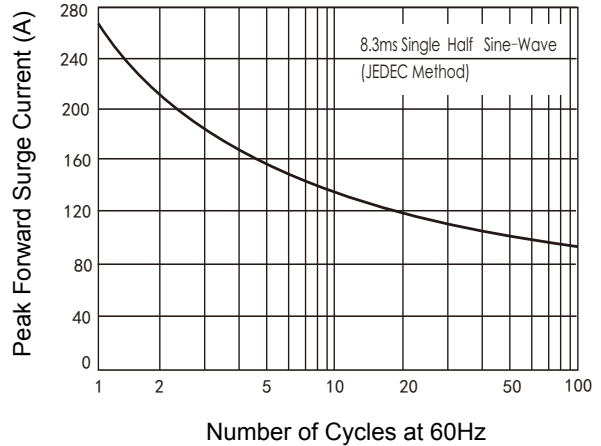


Figure 2. Max. Non-Repetitive Peak Forward Surge Current

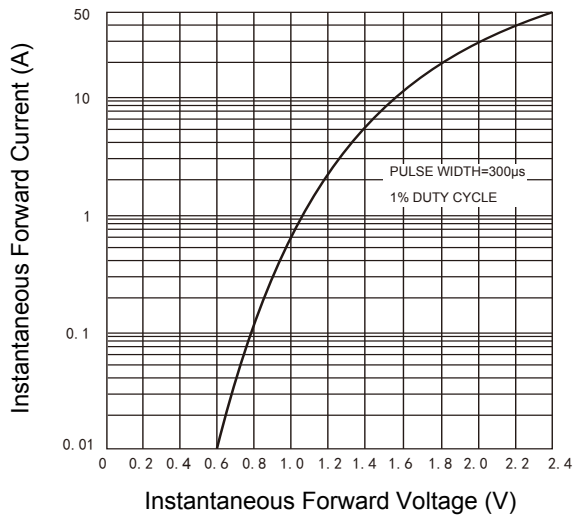


Figure 3. Typical Instantaneous Forward Characteristics

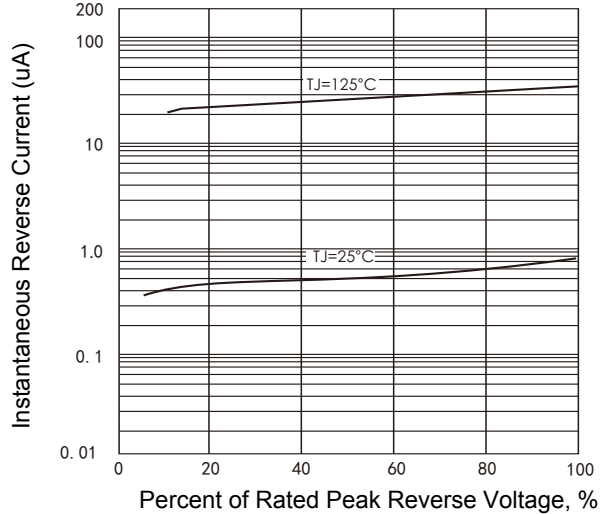
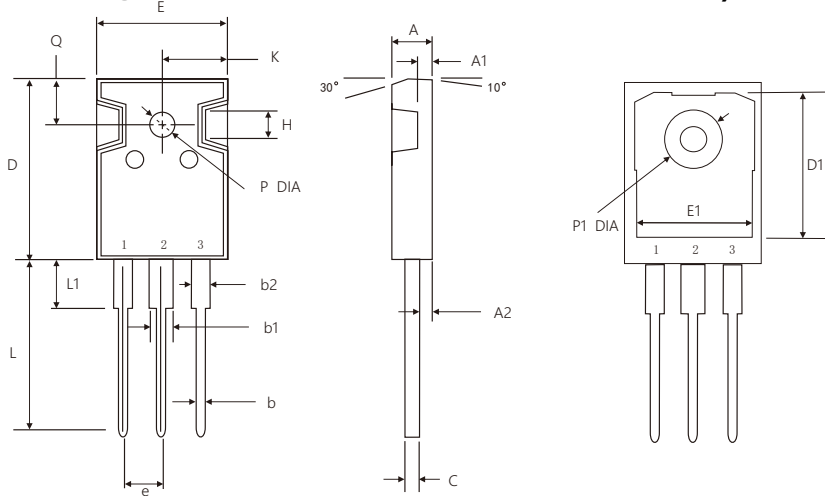


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (TO-247AB)



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 4.70 | 5.30 | 0.185 | 0.209 |
| A1 | 1.80 | 2.20 | 0.071 | 0.087 |
| A2 | 2.24 | 2.58 | 0.088 | 0.102 |
| b | 1.00 | 1.40 | 0.039 | 0.055 |
| b1 | 2.60 | 3.60 | 0.102 | 0.142 |
| b2 | 1.60 | 2.60 | 0.063 | 0.102 |
| C | 0.40 | 0.80 | 0.016 | 0.031 |
| D | 20.00 | 22.00 | 0.787 | 0.866 |
| D1 | 16.25 | 16.85 | 0.640 | 0.663 |
| E | 15.40 | 16.40 | 0.606 | 0.646 |
| E1 | 13.10 | 13.50 | 0.516 | 0.531 |
| L | 19.60 | 20.40 | 0.772 | 0.803 |
| e | 5.20 | 5.70 | 0.205 | 0.224 |
| L1 | 3.80 | 4.50 | 0.150 | 0.177 |
| P | 3.30 | 3.70 | 0.130 | 0.146 |
| P1 | - | 7.30 | - | 0.287 |
| Q | 5.40 | 6.40 | 0.213 | 0.252 |
| K | 7.40 | 8.20 | 0.291 | 0.323 |
| H | 4.60 REF | | 0.181 REF | |

Order Information

| Device | Package | Marking | Carrier | Quantity |
|-------------|----------|-----------|---------|-----------------|
| GSMUR3060PT | TO-247AB | MUR3060PT | Tube | 30 Units / Tube |

For more information, please contact us at: inquiry@goodarksemi.com