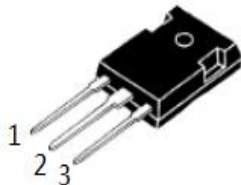
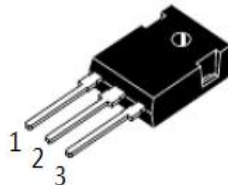


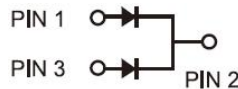
SCHOTTKY BARRIER RECTIFIER



TO-247/PT



TO-247S/PTS



FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

Lead Free Package and Finish

APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

| | |
|---------------|-------|
| I_O | 2*20A |
| V_{RRM} | 200V |
| I_{FSM} | 450A |
| V_F | 0.73V |
| T_{jmax} | 150°C |
| Assembly code | X X |

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

| Characteristics | Symbol | Value | Unit |
|---|-----------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 200 | V |
| Working Peak Reverse Voltage | V_{RWM} | 200 | V |
| Maximum DC Blocking Voltage | V_{DC} | 200 | V |
| Maximum Average Forward Rectified Current | Per Leg | 20 | A |
| | Total | 40 | |
| Peak Forward Surge Current,8.3 ms Single Half Sine-wave | I_{FSM} | 450 | A |
| Operating Temperature Range | T_J | 150 | °C |
| Storage Temperature Range | T_{STG} | -40 to +150 | °C |
| Typical Thermal Resistance (Note1) | $R_{\theta JC}$ | 2 | °C/W |

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

| Characteristics | | Symbol | Value | | Unit |
|---|----------|----------------|-------|------|------|
| Forward Voltage Drop(Note2) | | V _F | Typ. | Max. | V |
| at I _F =5A | TA=25°C | | 0.73 | - | |
| | TA=125°C | | 0.58 | - | |
| at I _F =10A | TA=25°C | | 0.79 | - | |
| | TA=125°C | | 0.65 | - | |
| at I _F =20A | TA=25°C | | 0.86 | 0.89 | |
| | TA=125°C | | 0.73 | - | |
| Maximum Reverse Current at V _R =200V | TA=25°C | I _R | 2 | 10 | μA |
| | TA=125°C | | 2 | - | mA |

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

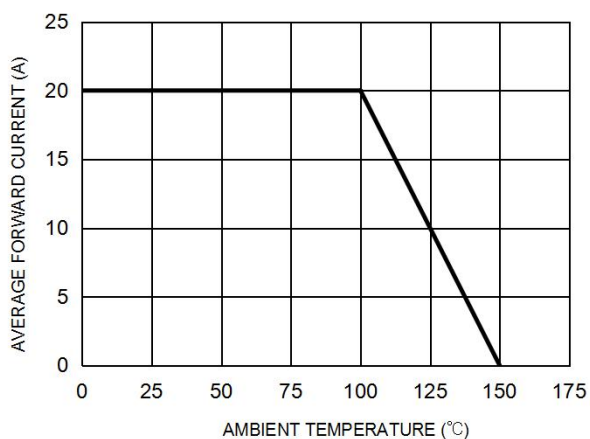


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

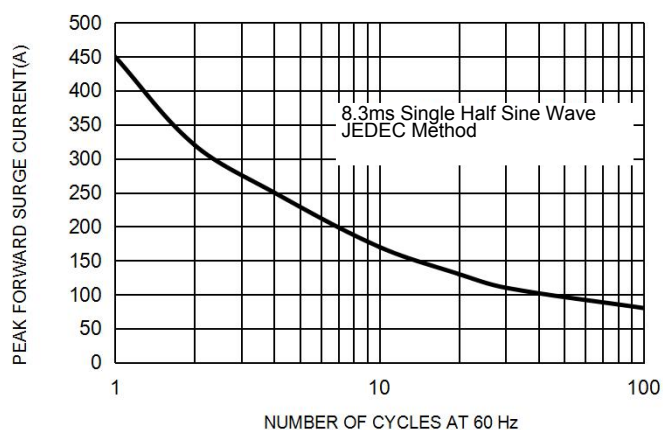


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

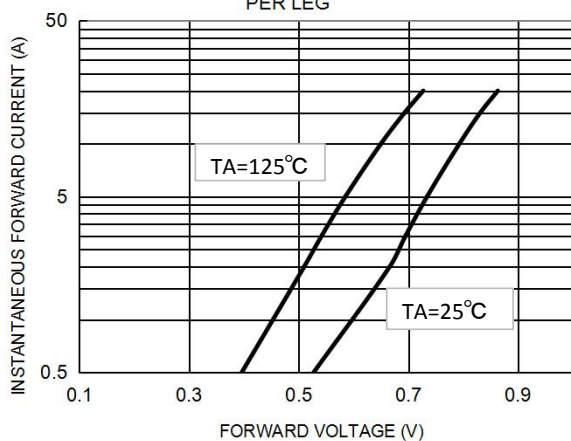
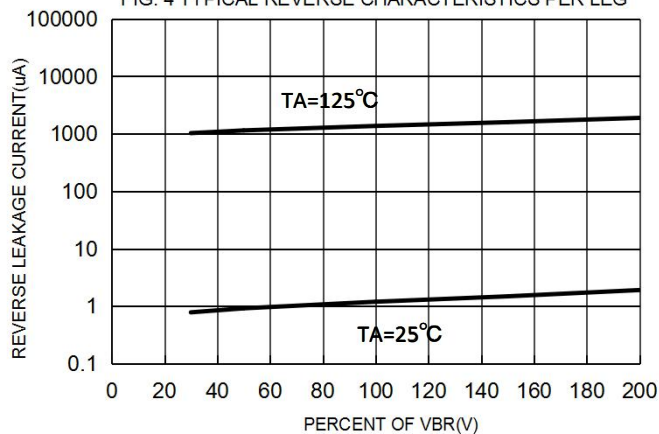
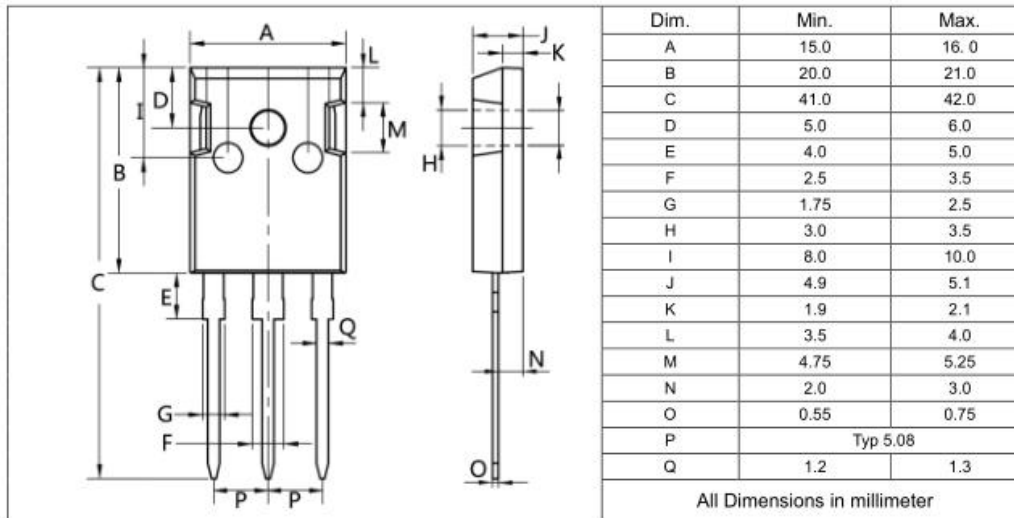


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Package Outline Dimensions millimeters

TO-247



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