

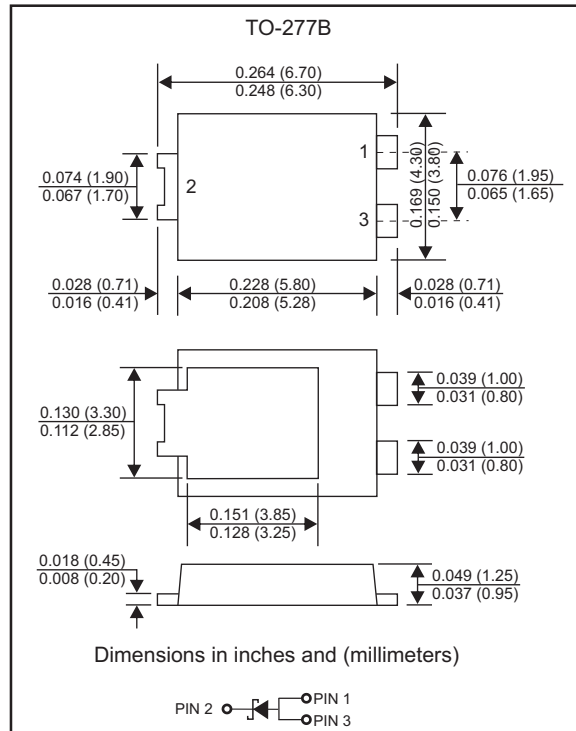
Features

- Ultra Low Forward Voltage Drop .
- Very low profile-typical height of 1.10mm
- Low Power Losses,High Efficiency Operation
- Low Thermal Resistance Package.
- High Operating Junction Temperature.
- Compliant to Halogen-free.
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : TO-277B , molded Plastic
- Terminals:Solderable per MIL-STD-750,Method 2026

Package outline



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

| Parameter | Symbol | SU15200-T-Q1 | Unit |
|--|-------------|--------------|------------------|
| DC Blocking Voltage | V_{DC} | 200 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| Repetitive Peak Reverse Voltage | V_{RRM} | | |
| RMS Reverse Voltage | V_{RMS} | 140 | V |
| Average Forward Rectified Current | $I_{F(AV)}$ | 15.0 | A |
| Peak Forward Surge Current, 8.3ms Half Sine-wave($T_A=25^\circ\text{C}$) | I_{FSM} | 200 | A |
| Operating junction temperature range | T_J | -55 to +150 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +150 | $^\circ\text{C}$ |

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

| Parameter | Test Conditions | Symbol | MIN. | TYP. | MAX. | Unit |
|-----------------|--|--------|------|------|------|------|
| Forward voltage | $I_F=15\text{A}, T_J=25^\circ\text{C}$ | V_F | - | - | 0.85 | V |
| Reverse current | $V_R=200\text{V}, T_J=25^\circ\text{C}$ | I_R | - | | 0.2 | mA |
| | $V_R=200\text{V}, T_J=100^\circ\text{C}$ | | - | | 50 | |

Thermal Characteristics

| Parameter | Symbol | SU15200-T-Q1 | Unit |
|---|-----------------|--------------|---------------------------|
| Typical thermal resistance junction to ambient (Note 1) | $R_{\theta JA}$ | 80 | $^\circ\text{C}/\text{W}$ |

Note 1: Mounted on FR-4 PCB copper pad area. Cathode pad dimensions 10.0mm x 10.0 mm

Rating and characteristic curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

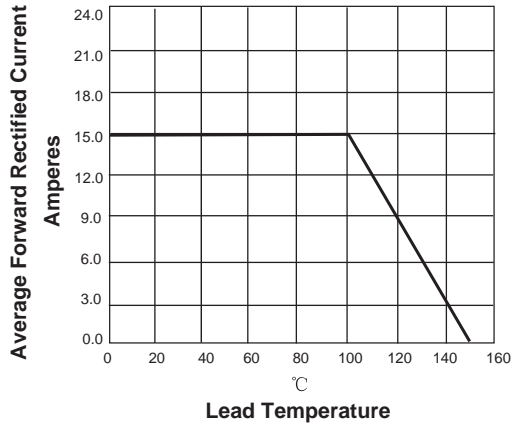


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

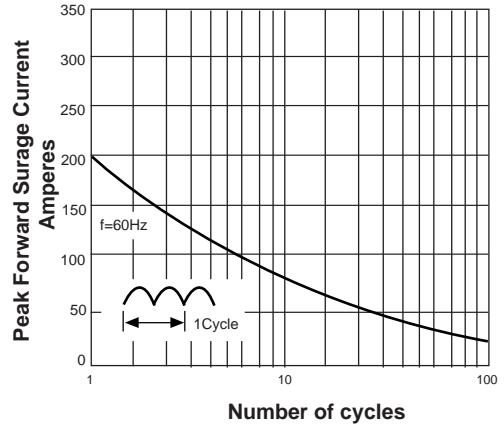


FIG. 1-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

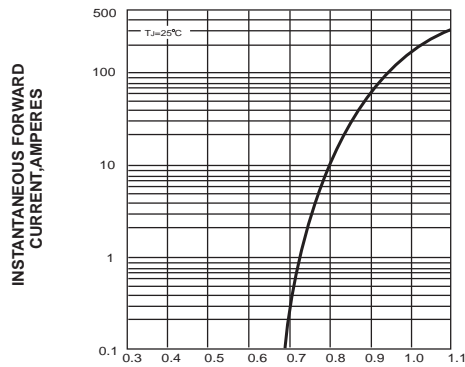


FIG. 2-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

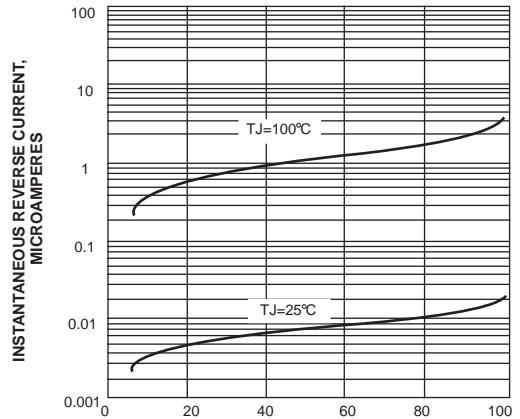

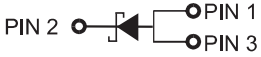


FIG. 3-INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 4-PERCENT OF PEAK REVERSE VOLTAGE, %



Pinning information

| Pin | Simplified outline | Symbol |
|--|---|---|
| Pin2 cathode Pin1 anode Pin3 anode |  |  |

Marking

| Type number | Marking code |
|--------------|--------------|
| SU15200-T-Q1 | SU15200 |

Suggested solder pad layout

