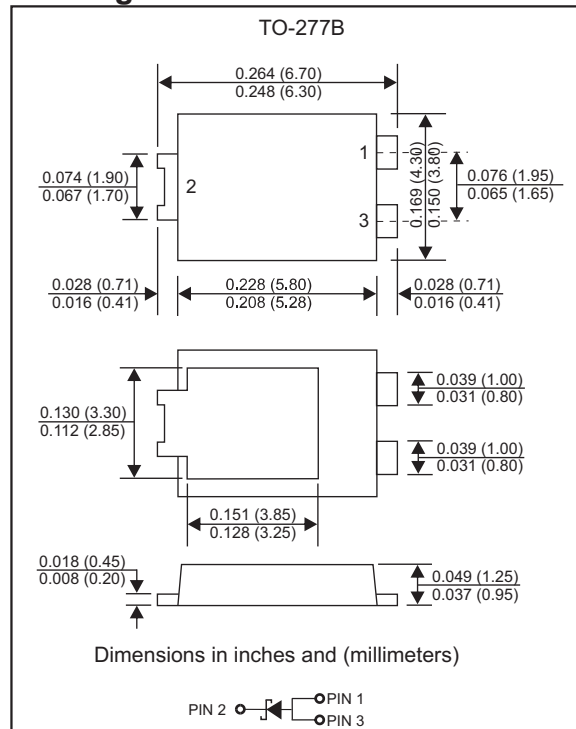


Package outline



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
- Marking:SL1560

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

| Parameter | Symbol | SL1560-T-Q1 | Unit |
|--|------------------------------------|-------------|--------------------|
| DC Blocking Voltage Working Peak Reverse Voltage Repetitive Peak Reverse Voltage | V_{DC} V_{RWM} V_{RRM} | 60 | V |
| RMS Reverse Voltage | V_{RMS} | 42 | 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} | 275 | 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)

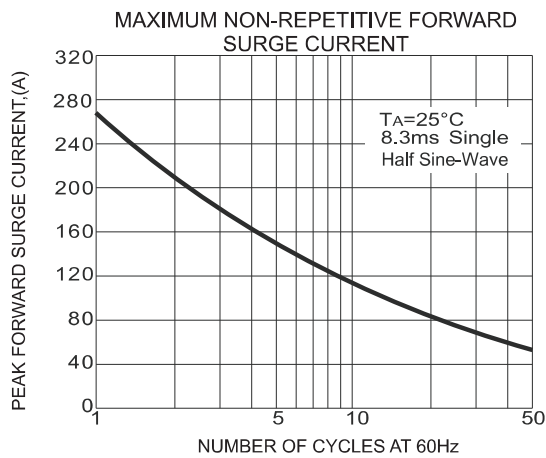
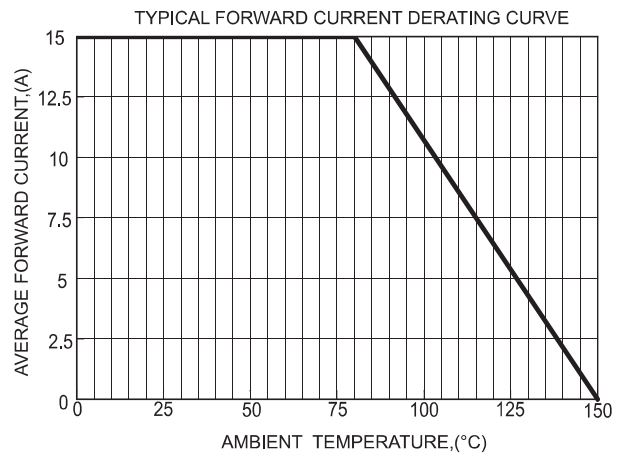
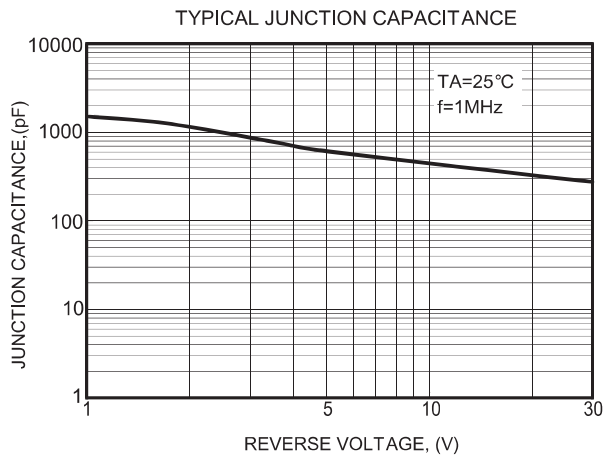
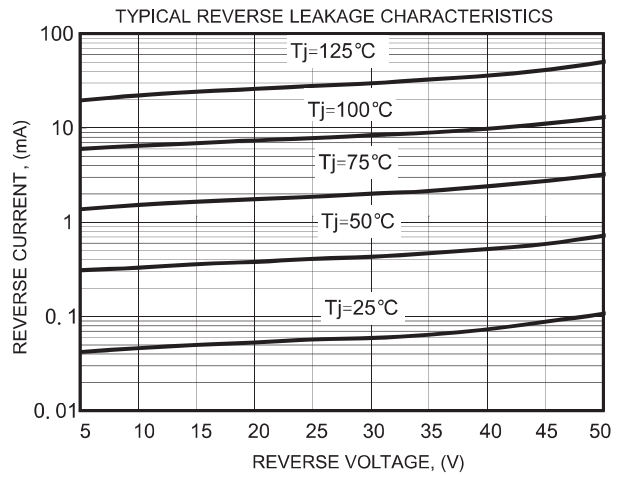
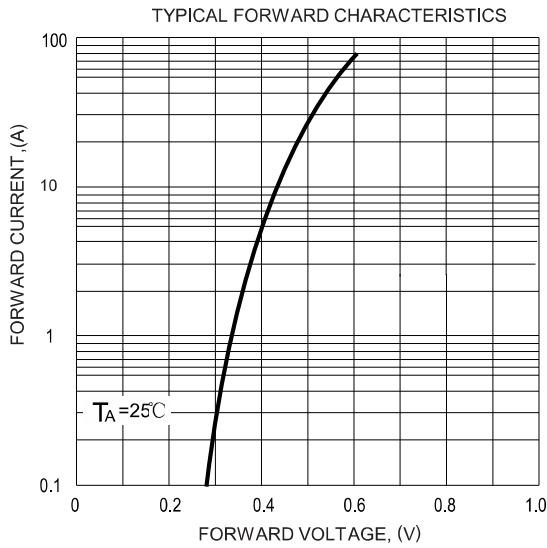
| Parameter | Test Conditions | Symbol | MIN. | TYP. | MAX. | Unit |
|---------------------------|--|--------|------|------|------|------|
| Reverse Breakdown Voltage | $I_R=0.5\text{mA}, T_J=25^{\circ}\text{C}$ | V_B | 60 | - | - | V |
| Forward voltage | $I_F=15\text{A}, T_J=25^{\circ}\text{C}$ | V_F | - | 0.52 | 0.55 | V |
| Reverse current | $V_R=60\text{V}, T_J=25^{\circ}\text{C}$ | I_R | - | 0.15 | 0.3 | mA |
| | $V_R=60\text{V}, T_J=100^{\circ}\text{C}$ | | - | 5 | 15 | |

Thermal Characteristics


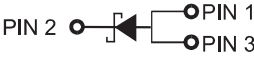
| Parameter | Symbol | SL1560-T-Q1 | Unit |
|---|-----------------|-------------|-----------------------------|
| Typical thermal resistance junction to ambient (Note 1) | $R_{\theta JA}$ | 13 | $^{\circ}\text{C}/\text{W}$ |
| Typical thermal resistance junction to case (Note 1) | $R_{\theta JC}$ | 2 | $^{\circ}\text{C}/\text{W}$ |

Note 1: Mounted on FR-4 PCB copper pad area. Cathode pad dimensions 4.95mm x 3.4mm.
Anode pad dimensions 1 55mm x 5 0mm.

Rating and characteristic curves



Pinning information

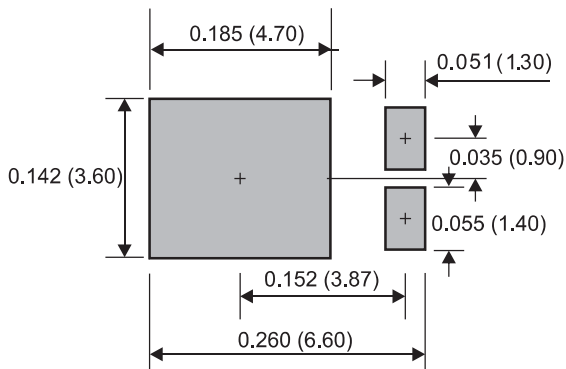
| Pin | Simplified outline | Symbol |
|--|---|---|
| Pin2 cathode Pin1 anode Pin3 anode |  |  |

Marking

| Type number | Marking code |
|-------------|--------------|
| SL1560-T-Q1 | SL1560 |

Suggested solder pad layout

TO-277B



Dimensions in inches and (millimeters)