

VOLTAGE RANGE: 40 - 100V
CURRENT: 15 A

Features

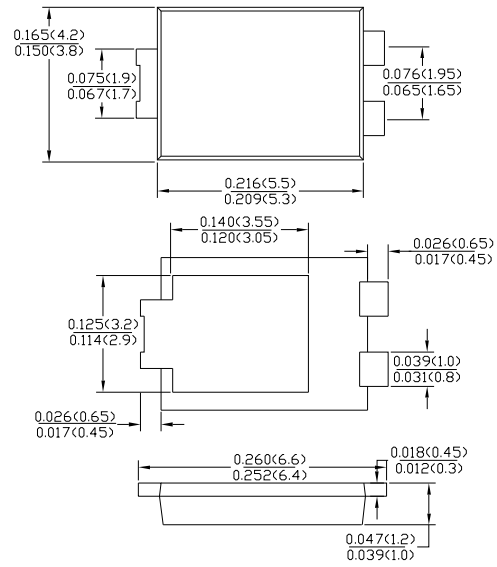
- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- Low forward voltage drop
- High forward surge current capability
- High temperature soldering guaranteed
250°C/10 seconds at terminals

Mechanical Data

- Case: TO-277 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



TO-277



Dimensions inches and (millimeters)

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Parameter | SYMBOLS | SL1540 | SL1545 | SL1550 | SL1560 | SL1580 | SL15100 | UNITS |
|--|-------------------|-------------|--------|--------|--------|--------|---------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 40 | 45 | 50 | 60 | 80 | 100 | V |
| Maximum RMS voltage | V _{RMS} | 28 | 31.5 | 35 | 42 | 56 | 70 | V |
| Maximum DC blocking voltage | V _{DC} | 40 | 45 | 50 | 60 | 80 | 100 | V |
| Maximum average forward rectified current at T _L =100°C | I _(AV) | 15.0 | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 250.0 | | | | | | A |
| Maximum instantaneous forward voltage at 2.0A at 15.0A | V _F | 0.35 | 0.40 | 0.45 | 0.55 | 0.70 | | V |
| Maximum DC reverse current at rated DC blocking voltage | I _R | | 0.5 | 0.2 | | | | mA |
| | | | 50 | 20 | | | | |
| Typical thermal resistance | R _{qJA} | 60.0 | | | | | | °C/W |
| Operating junction temperature range | T _J | -55 to +150 | | | | | | °C |
| Storage temperature range | T _{STG} | -55 to +150 | | | | | | °C |

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

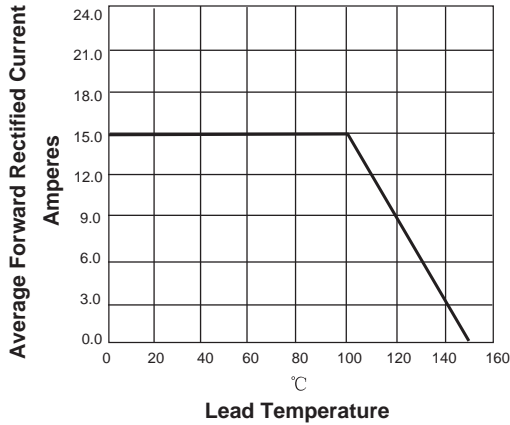


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

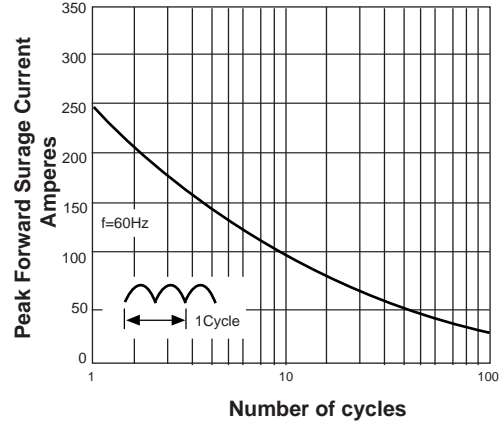


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

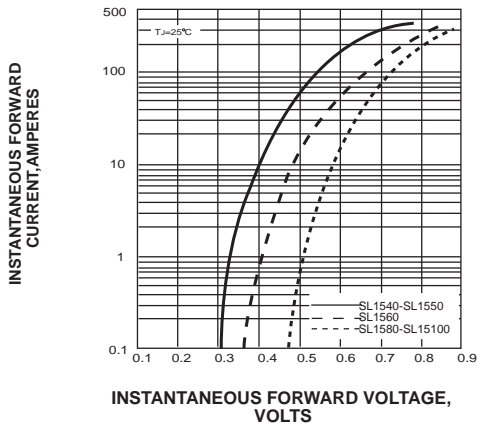


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

