SR1540L~SR15100L

SCHOTTKY BARRIER RECTIFIER

Features

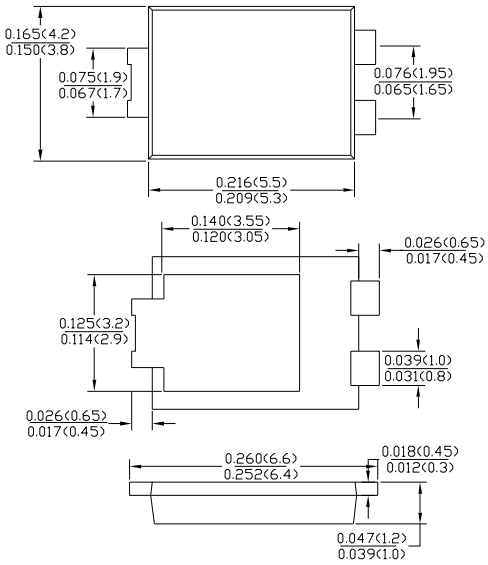
- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief,ideal for automated placement
- Low forward voltage drop
- High forward surge current capability
- High temperature soldering guaranteed
  250℃/10 seconds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

RoHS COMPLIANT

TO-277



Dimiensions inches and (milimenters)

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	SR1540L	SR1545L	SR1550L	SR1560L	SR1580L	SR15100L	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℃	$I_{(AV)}$	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 0.48			0.40 0.55	0.45 0.70		V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	0.5 50				0.2 20		mA
Typical thermal resistance	$R_{\theta JA}$	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

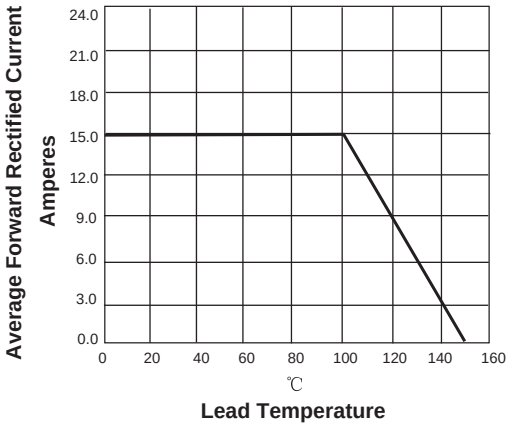


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

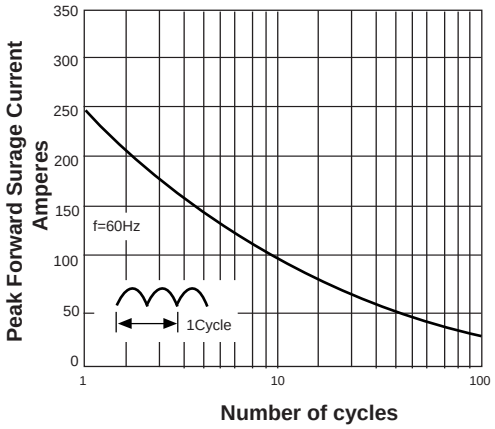


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

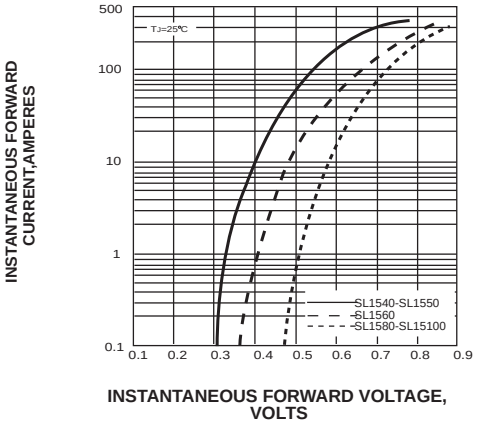
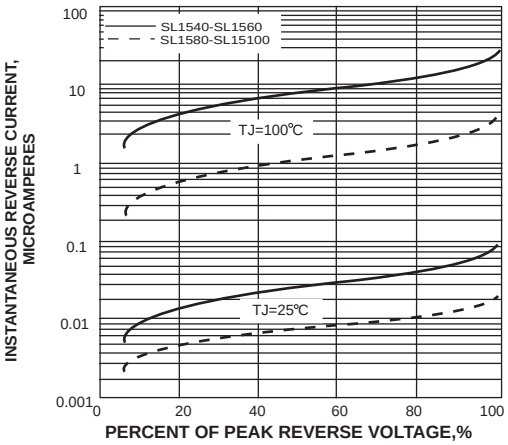



FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS