

Features

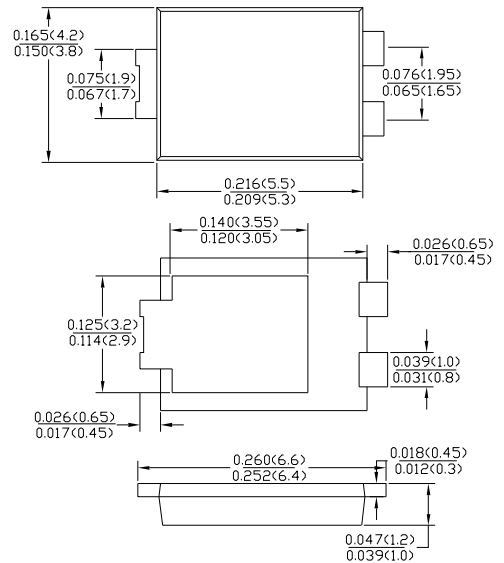
- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability

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 $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SL1545	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current (Note 1) @ $T_L = 90^\circ\text{C}$	I_O	15.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @ $T_L = 75^\circ\text{C}$	I_{FSM}	275	A
Forward Voltage Drop @ $I_F = 15\text{A}, T_j = 25^\circ\text{C}$	V_{FM}	0.47	V
Peak Reverse Current @ $V_F = 45\text{V}, T_j = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $V_F = 45\text{V}, T_j = 100^\circ\text{C}$	I_{RM}	0.3 15	mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15	$^\circ\text{C/W}$
Operating Temperature Range	T_j	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

- Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
 2. FR-4 PCB, 2oz. Copper, minimum recommended pad layout .
 3. Polyimide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.



Fig.1 - Forward Current Derating Curve

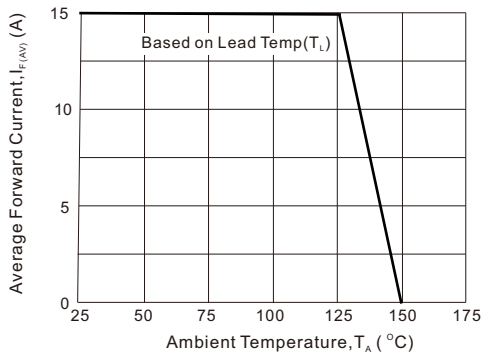


Fig2 : Instantaneous Forward Voltage

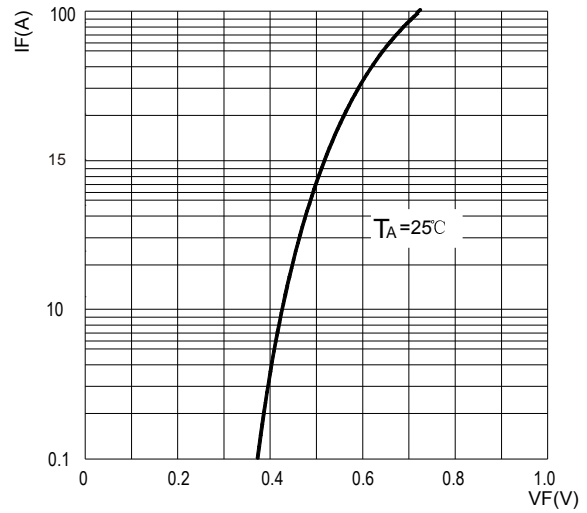


Fig3: Surge Forward Current Capadility

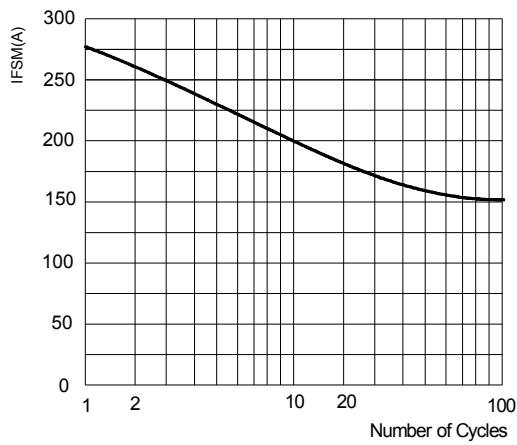


Fig4: Typical Reverse Characteristics

