

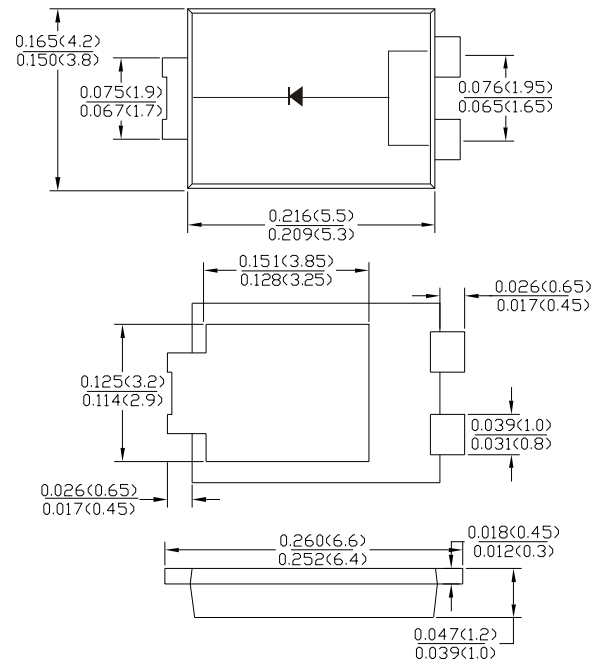
### Features

- 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
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: TO-277, molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version

### TO-277B



dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub> =25 °C unless otherwise specified

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

Parameter	Symbol	SD10S100SL	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	V
DC blocking voltage	V <sub>DC</sub>		
RMS Rectified Voltage	V <sub>R(RMS)</sub>	70	V
Average Rectified Output Current (Note1)	IF(AV)	10.0	A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load (JEDEC Method) (Note2)	I <sub>FSM</sub>	150	A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	93.375	A <sup>2</sup> s
Forward Voltage Drop T <sub>A</sub> =25 °C @IF=5A	V <sub>FM</sub>	0.64	V
Peak Reverse Current T <sub>A</sub> =25 °C At Rated DC Blocking Voltage T <sub>A</sub> =100 °C	I <sub>R</sub>	0.3 15	mA
Typical Thermal Resistance Junction to Ambient	R <sub>θJC</sub> R <sub>θJL</sub>	15 5	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Note: 1. Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

2. Fr-4pcb. 2oz. Copper, minimum recommend pad layout .18.8mm×14.4. Anode pad dimensions 5.6mm×14.4mm.

### RATING AND CHARACTERISTICS CURVES

Fig.1 - Forward Current Derating Curve

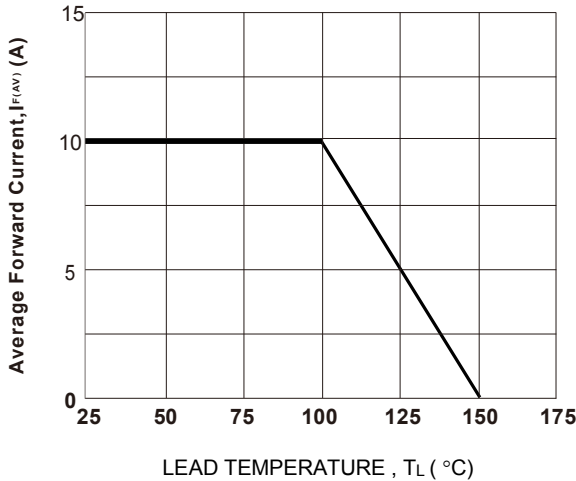


Fig. 2 Typical Forward Characteristics (per leg)

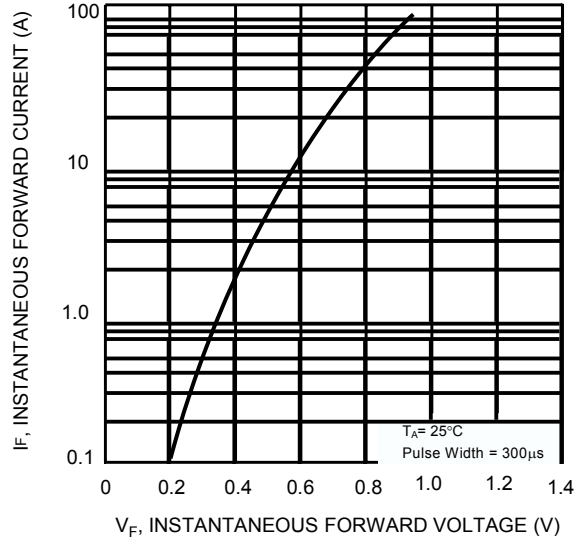


Fig. 3 Maximum Peak Forward Surge Current (per leg)

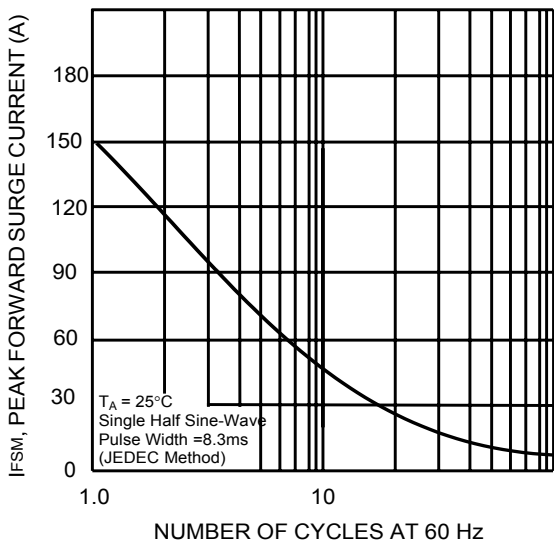
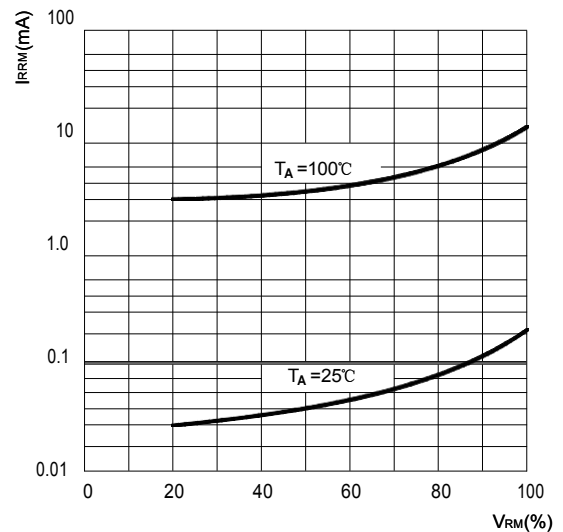


Fig4: Typical Reverse Characteristics



#### PACKAGE INFORMATION

Device	Package	Shipping
SD10S100SL	TO-277	5000/Tape&Reel

