

FEATURES

- ✧ High current capability, low forward voltage
- ✧ Excellent high temperature stability
- ✧ Low power loss, and high efficiency
- ✧ High forward surge capability
- ✧ RoHS compliant, and Halogen free

ORDERING INFORMATION

- ✧ Device: SD10U200SL
- ✧ Package: TO-277B
- ✧ Material: Halogen free
- ✧ Packing: Tape & 13" Reel
- ✧ Quantity per reel:
5,000pcs

PIN CONFIGURATION



MACHANICAL DATA

- ✧ Case: TO-277B small outline plastic package
- ✧ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ✧ Molding Compound Flammability Rating: UL94-0
- ✧ High temperature soldering guaranteed:
260°C /10second
- ✧ Packed with FRP substrate and epoxy underfilled

APPLICATIONS

- ✧ Switching mode power supply applications
- ✧ Portable equipment battery applications
- ✧ High frequency rectification
- ✧ DC/DC converter
- ✧ Designed as bypass diodes for solar panels

PACKAGE OUTLINE



ABSOLUTE MAXIMUM RATING (T_{amb}=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units
V _{RRM} V _{RWM} V _{DC}	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	200	V
V _{R(RMS)}	RMS Rectified Voltage	140	V
I _{F(AV)}	Average Forward Current	10	A
I _{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	150	A
R _{θJA} R _{θJL}	Typical Thermal Resistance Junction to Ambient	60 3.0	°C/W
T _J & T _{STG}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _F	Forward Voltage	I _F = 10A @ 25°C		0.85		V
I _R	Reverse Leakage Current	@ 25°C		0.3		mA
		@ 100°C		15		mA

ELECTRICAL CHARACTERISTICS CURVE

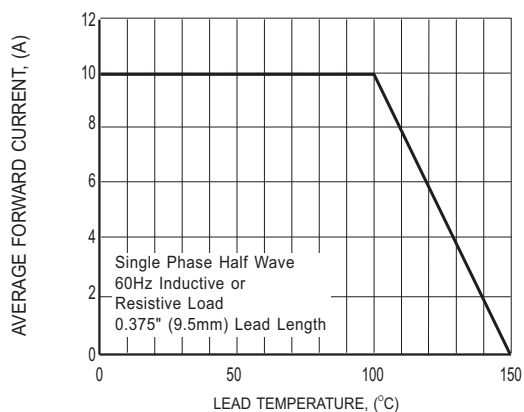


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

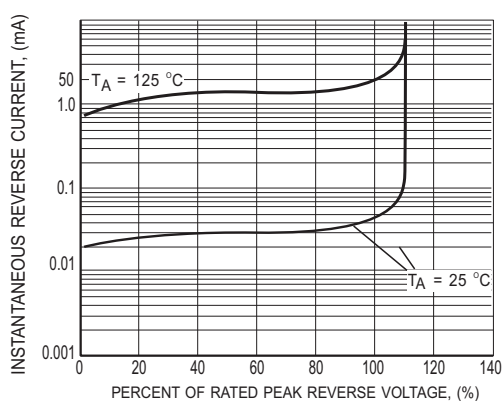


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

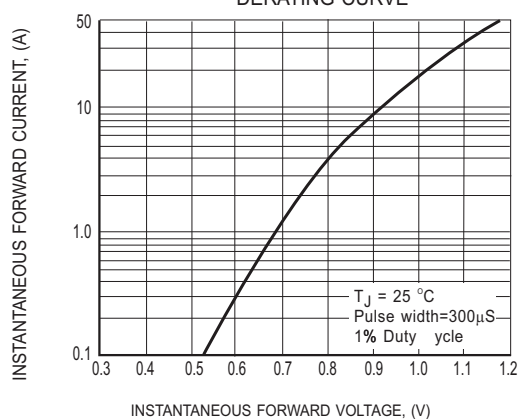


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

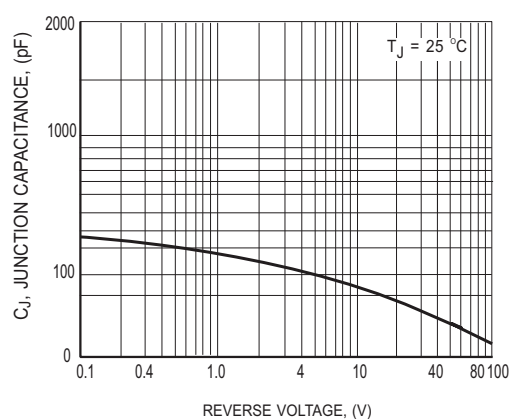


FIG.4 TYPICAL JUNCTION CAPACITANCE

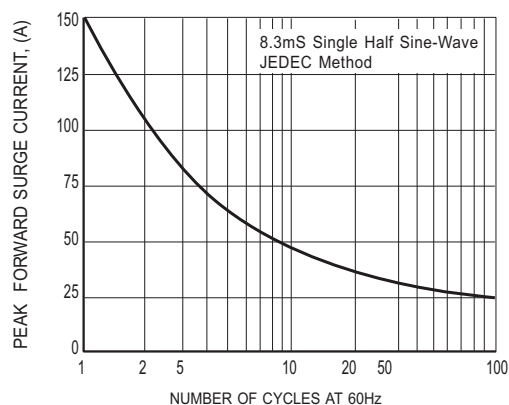
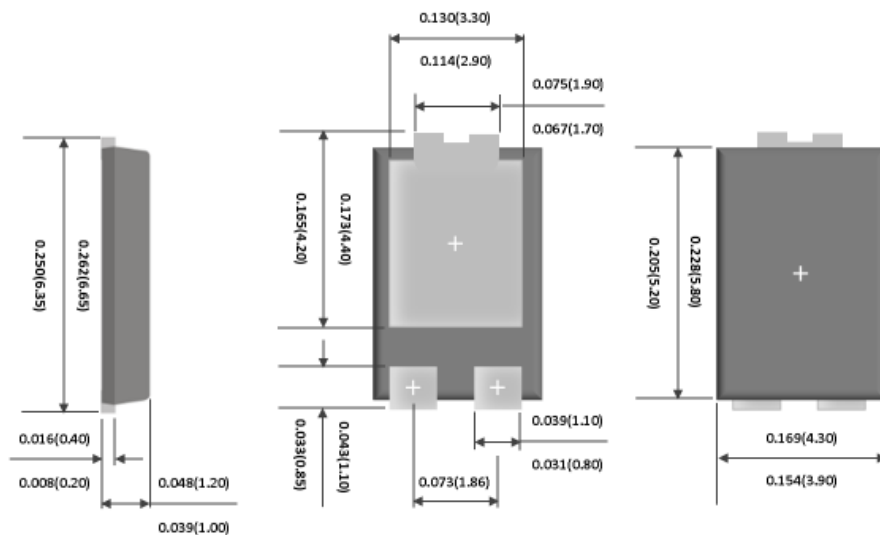


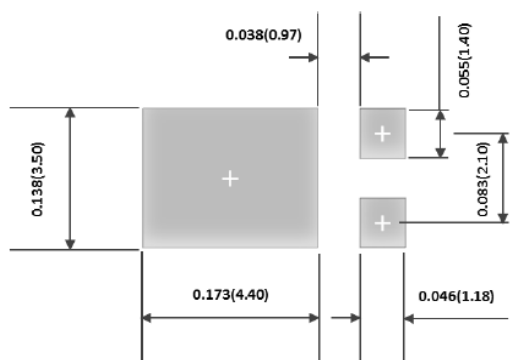
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

TO-277B PACKAGE OUTLINE DIMENSIONS



unit: mm

FOOT PRINT RECOMMENDATION



unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
SD10U200SL	TO-277	5000/Tape&Reel