

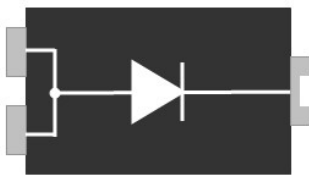
FEATURES

- ◇ 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:SD15U100SL
- ◇ Package: TO-277
- ◇ Material: Halogen free
- ◇ Packing: Tape & 13" Reel
- ◇ Quantity per reel:
5,000pcs

PIN CONFIGURATION



MACHANICAL DATA

- ◇ Case: TO-277 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

ACKAGE OUTLINE



ABSOLUTE MAXIMUM RATING ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified)

Symbol	Parameter	Value	Units
V_{RRM} V_{RWM} V_{DC}	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	100	V
$V_{R(RMS)}$	RMS Rectified Voltage	70	V
$I_{F(AV)}$	Average Forward Current	15	A
I_{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	220	A
$R_{\theta JA}$ $R_{\theta JL}$	Typical Thermal Resistance Junction to Ambient	70 6	$^{\circ}\text{C}/\text{W}$
T_J & T_{STG}	Junction and Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_F	Forward Voltage	$I_F = 10\text{A} @ 25^{\circ}\text{C}$		0.60	0.65	V
I_R	Reverse Leakage Current	@ 25°C		120	200	μA
		@ 125°C		15	20	mA

ELECTRICAL CHARACTERISTICS CURVE

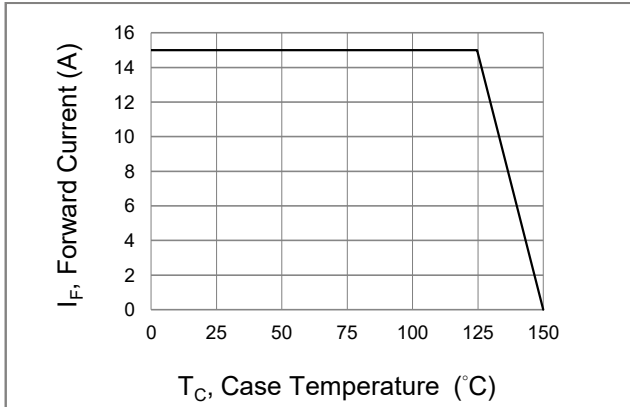


Fig.1 Forward Current Derating Curve

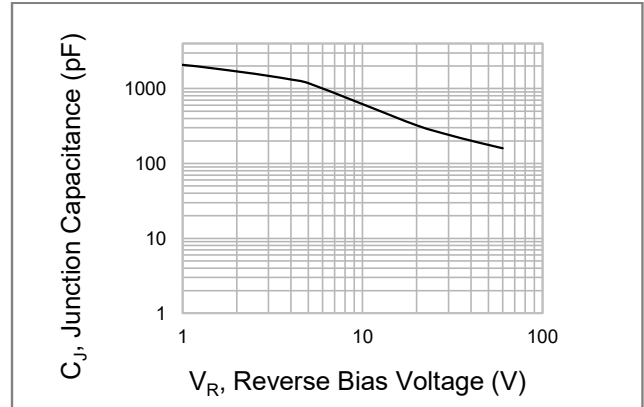


Fig.2 Typical Junction Capacitance

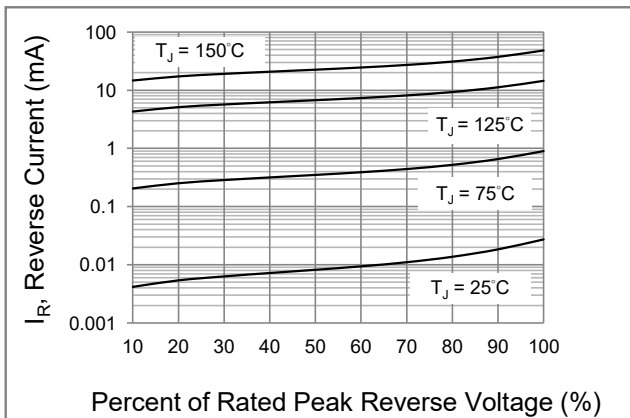


Fig.3 Typical Reverse Characteristics

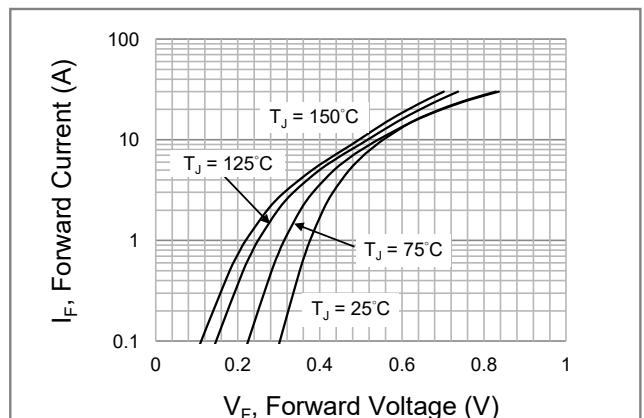


Fig.4 Typical Forward Characteristics

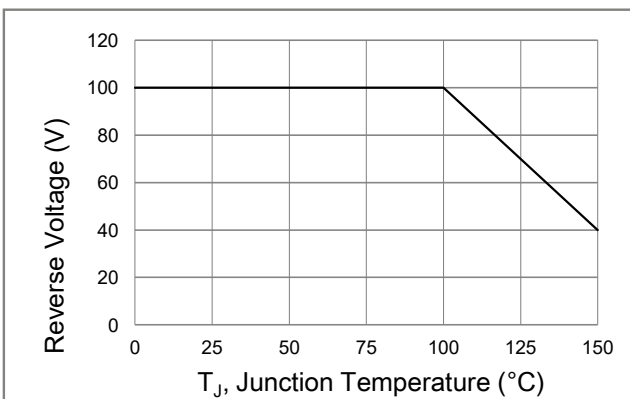
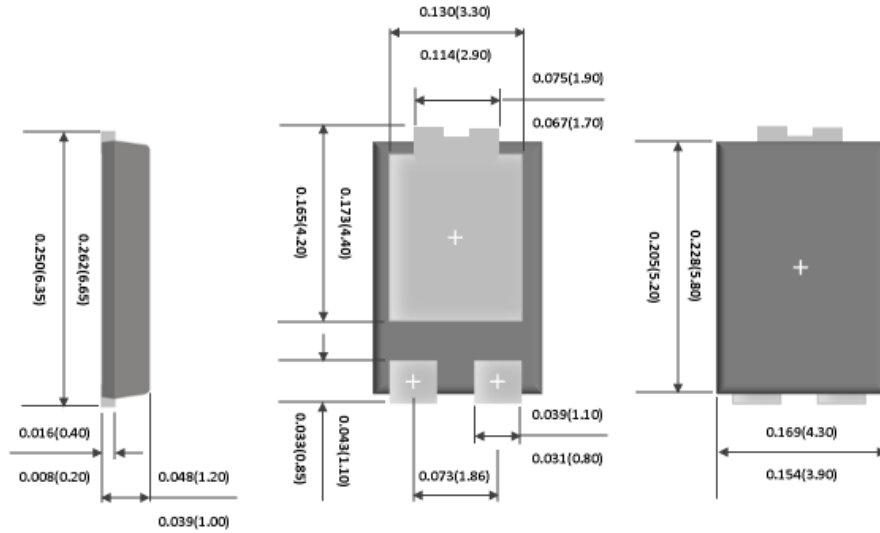


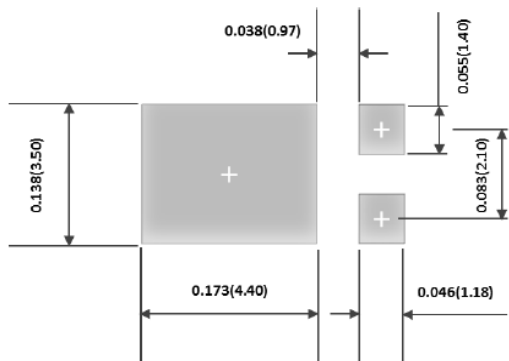
Fig.5 Operating Temperature Derating Curve

TO-277 PACKAGE OUTLINE DIMENSIONS



unit: mm

FOOT PRINT RECOMMENDATION



unit: mm

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG
TO-277	5000/REEL	80000	41X38X36	12.00