



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

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

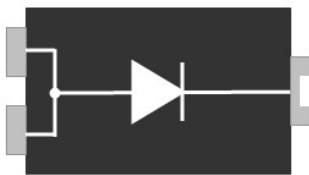
ORDERING INFORMATION

- ◇ Device:SD8U60SL
- ◇ Package: TO-277
- ◇ Material: Halogen free
- ◇ Packing: Tape & 13" Reel
- ◇ Quantity per reel:
5,000pcs

APPLICATIONS

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

PIN CONFIGURATION



ACKAGE 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	60	V
V _{R(RMS)}	RMS Rectified Voltage	42	V
I _{F(AV)}	Average Forward Current	8	A
I _{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	200	A
R _{θJA} R _{θJL}	Typical Thermal Resistance Junction to Ambient	60 15	°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 = 8A @ 25°C I _F = 8A @ 125°C		0.48 0.44	0.50 0.47	V
I _R	Reverse Leakage Current	@ 25°C		5.0	50	μA
		@ 100°C		5.0	20	mA

ELECTRICAL CHARACTERISTICS CURVE

Fig.1 - Forward Current Derating Curve

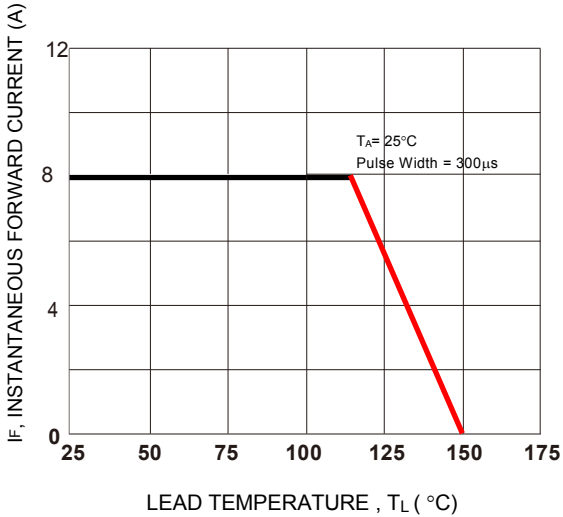


Fig. 2 Typical Forward Characteristics ()

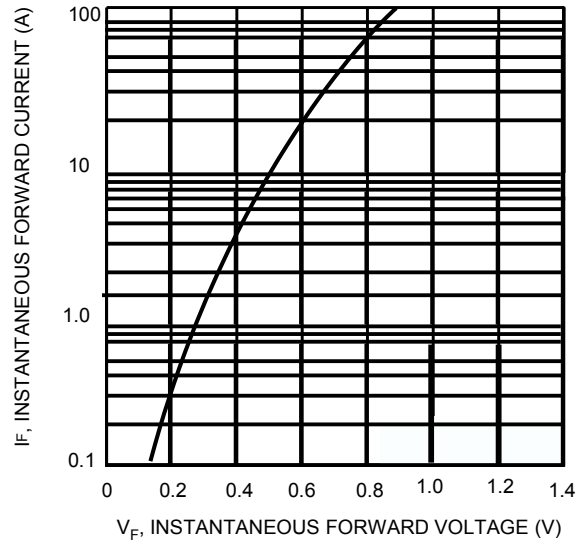


Fig. 3 Maximum Peak Forward Surge Current (per leg)

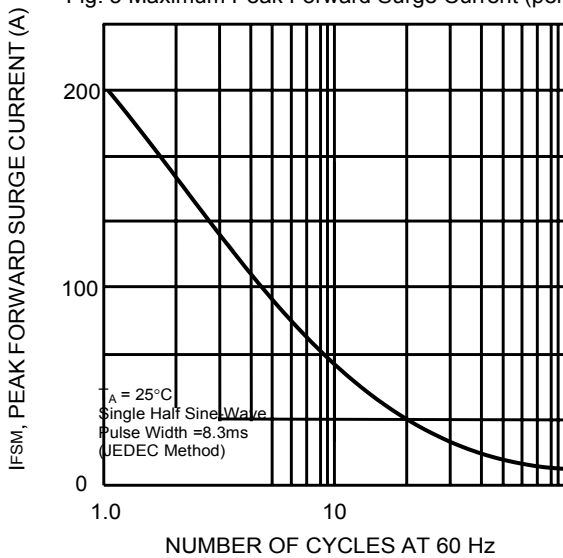
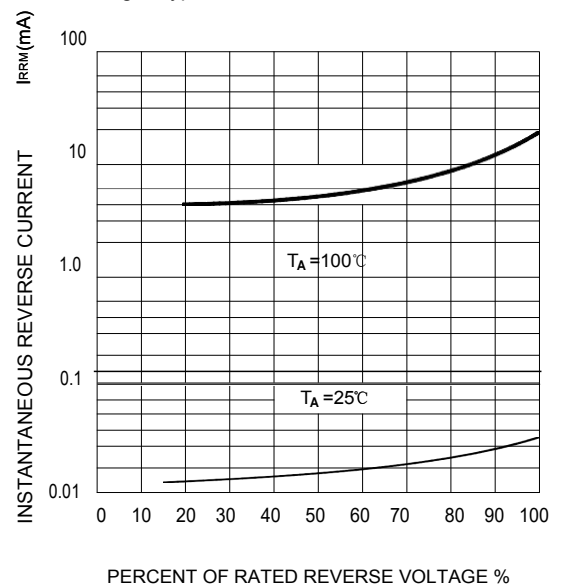
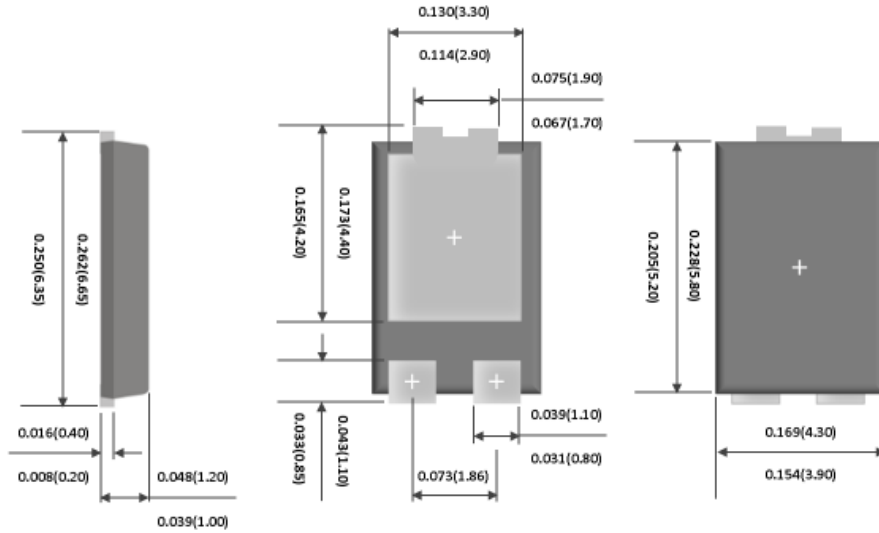


Fig4: Typical Reverse Characteristics

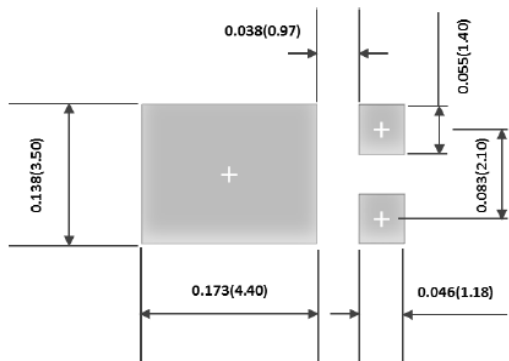


TO-277 PACKAGE OUTLINE DIMENSIONS



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