SD5100-SD5200

5A 100 to 200 Volts Schottky Rectifier

RoHS COMPLIANT

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

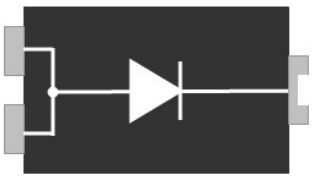
ORDERING INFORMATION

- ✧ Device:SD10U150SL
- ✧ 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



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SD5100-SD5200

RoHS COMPLIANT

ABSOLUTE MAXIMUM RATING (Tamb=25℃, unless otherwise specified)

Symbol	Parameter	SD5100	SD5150	SD5200	Units
V_{RRM} V_{RWM} V_{DC}	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	100	150	200	V
$V_{R(RMS)}$	RMS Rectified Voltage	70	105	140	V
$I_{F(AV)}$	Average Forward Current	5			A
I_{FSM}	Peak Forward Surge Current 8.3ms single half sine-wave	150			A
I^2T	Typical Current Square Time	93.4			A^2S
$R_{\theta JA}$ $R_{\theta JL}$	Typical Thermal Resistance Junctionto Ambient	55 17			℃/W
T_J & T_{STG}	Junction and Storage Temperature	-55~+175			℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃, unless otherwise specified)

Symbol	Parameter	Test Condition	Max	Units
V_F	Forward Voltage	I_F = 5A @ 25°C	0.88	V
I_R	Reverse Leakage Current	@ 25°C	5	μA
		@ 125°C	2	mA

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RoHS COMPLIANT

ELECTRICAL CHARACTERISTICS CURVE

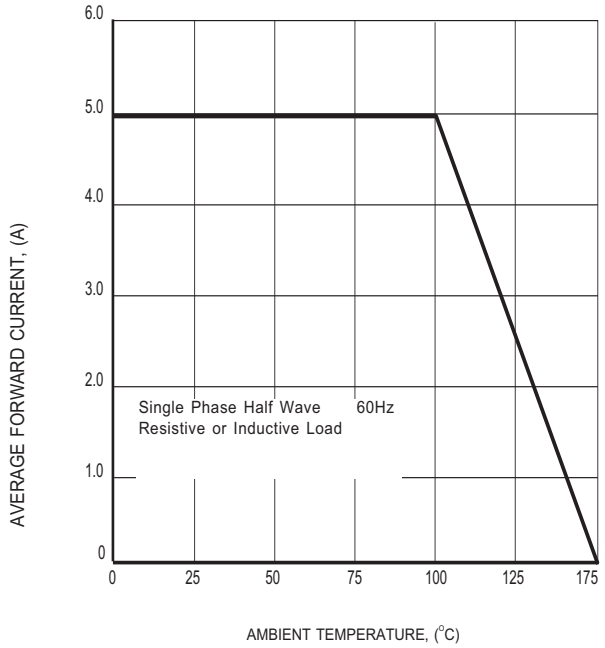


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

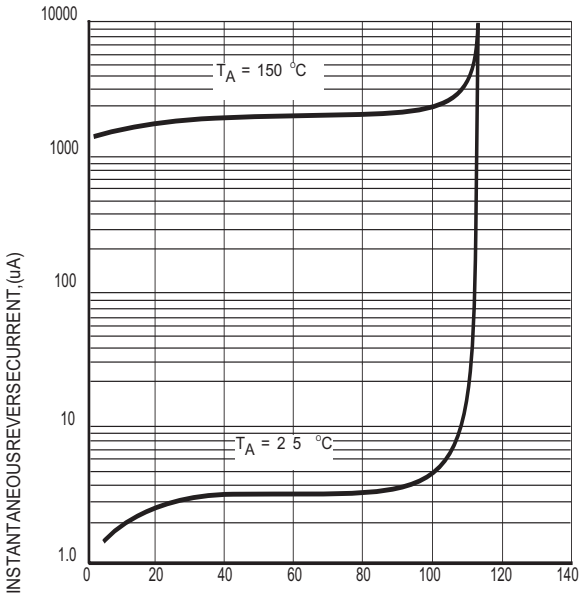


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

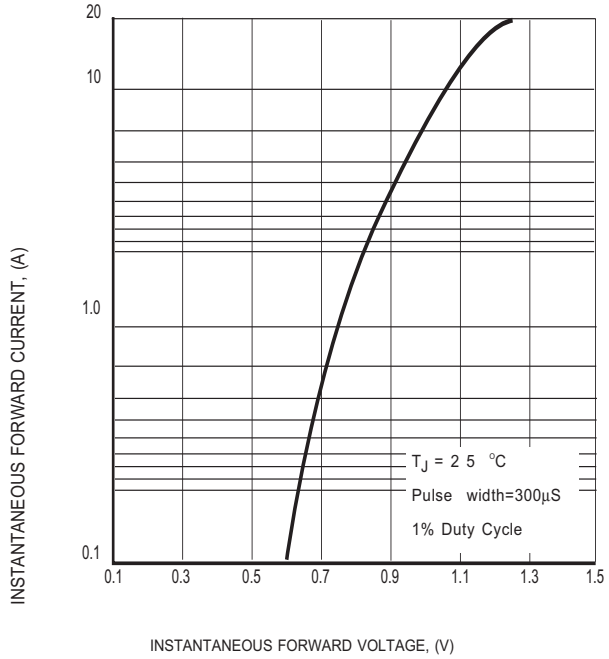


FIG.3 MAXIMUM INSTANNTANEOUS FORWARD CHARACTERISTICS

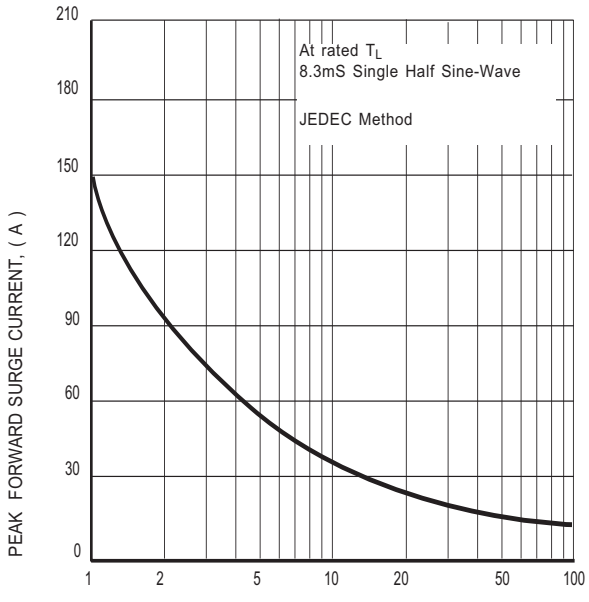
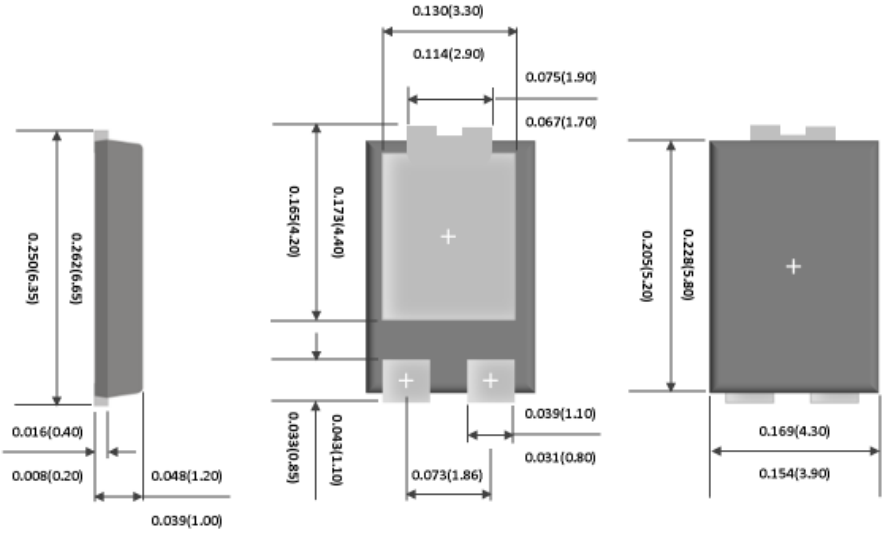


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

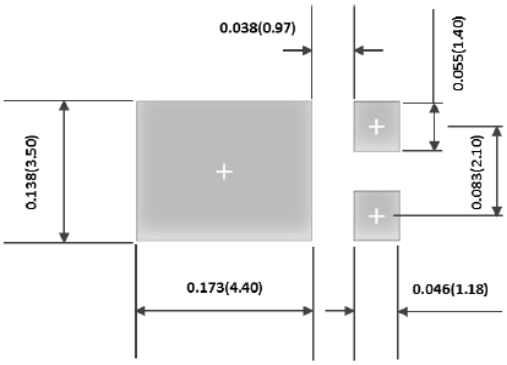
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TO-277 PACKAGE OUTLINE DIMENSIONS



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

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