

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: SD15U50SL
- ✧ Package: TO-277
- ✧ Marking: 15U50
- ✧ Material: Halogen free
- ✧ Packing: Tape & 13" Reel

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

PACKAGE OUTLINE



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

Symbol	Parameter	Value	Units
V_{RRM}	Repetitive Peak Reverse Voltage	50	V
$I_{F(AV)}$	Average Forward Current	15	A
I_{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	275	A
T_J & T_{STG}	Junction and Storage Temperature	-50~+150	°C

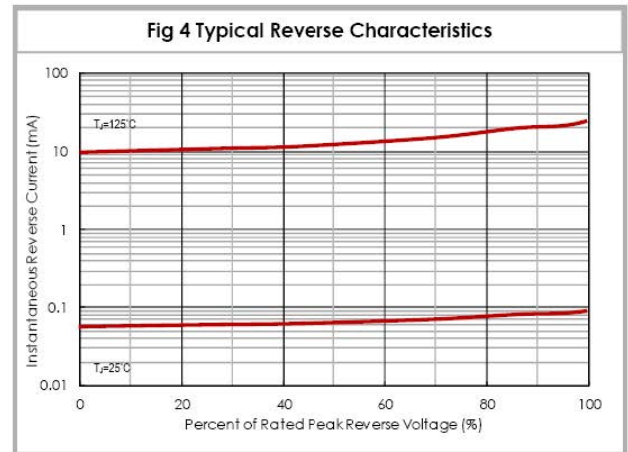
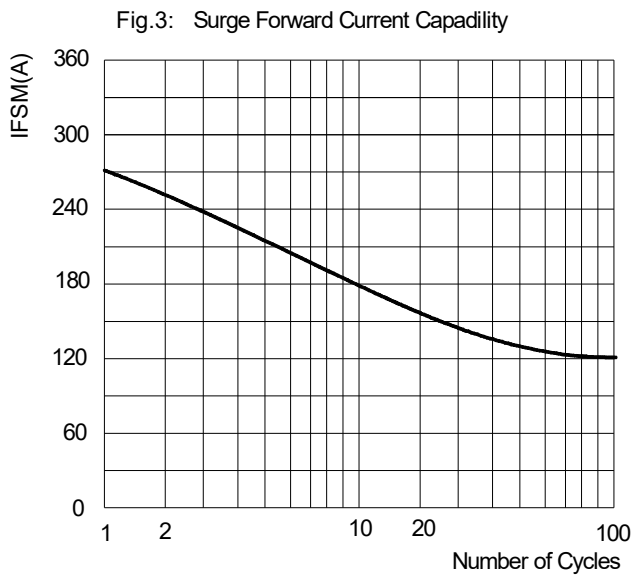
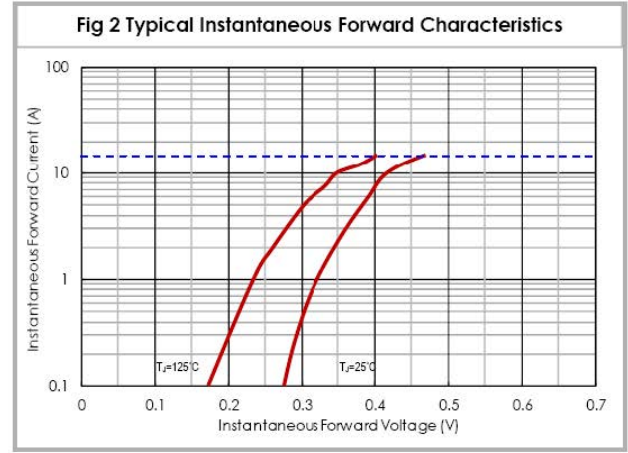
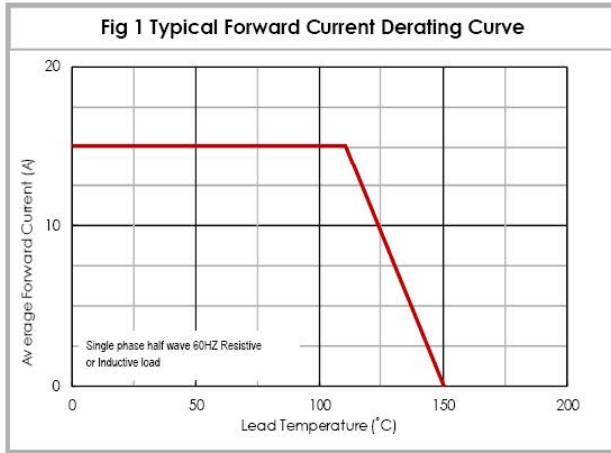
ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Parameter	Symbol	SD15U50SL	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	V
Working Peak Reverse Voltage	V_{RWM}		
DC blocking voltage	V_{DC}		
RMS Rectified Voltage	$V_{R(RMS)}$	35	V
Average Rectified Output Current (Note1)	$I_F(AV)$	15	A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	275	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	313.84	A ² s
Forward Voltage Drop $T_A = 25^\circ C$ @ $I_F = 15A$	V_{FM}	0.45	V
Peak Reverse Current $T_A = 25^\circ C$ At Rated DC Blocking Voltage $T_A = 100^\circ C$	I_R	0.3 15	mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	31 15	°C/W
Operating junction temperature range	T_J	-55 to +150	°C
storage temperature range	T_{STG}	-55 to +150	°C

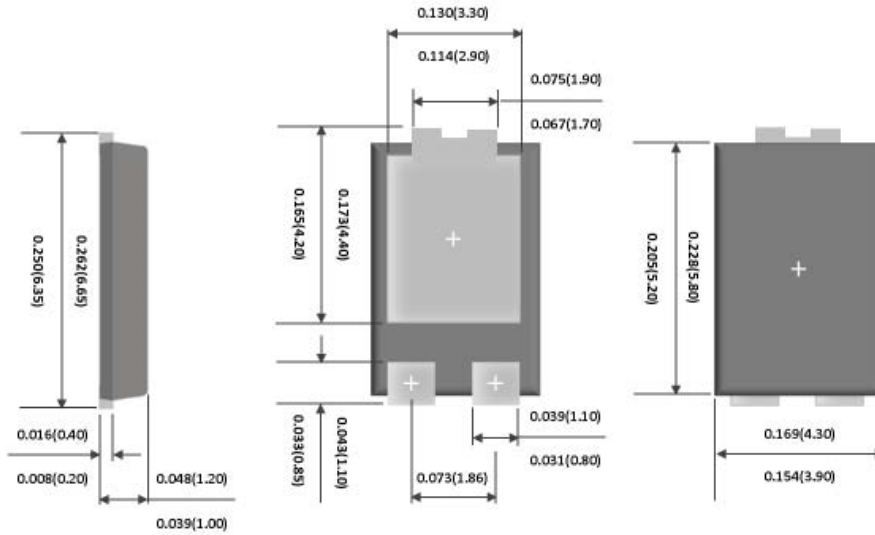
Note:1. Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

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

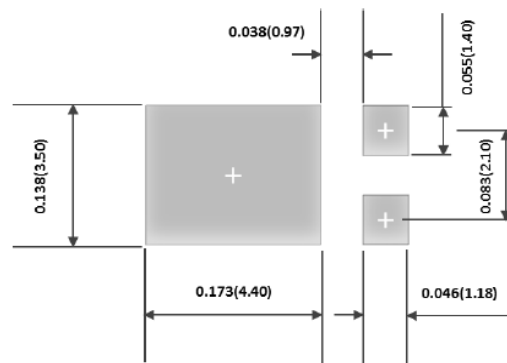
ELECTRICAL CHARACTERISTICS CURVE



TO-277 PACKAGE OUTLINE DIMENSIONS



FOOT PRINT RECOMMENDATION



unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
SD15U50SL	TO-277	5000/Tape&Reel

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [LGE](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [JANTX1N5712-1](#) [SB007-03C-TB-E](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [10BQ060-M3/5BT](#) [NRVB130LSFT1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#) [PDS1040Q-13](#)