SD15U50SL

15A/50V Ultra Low VF Schottky Rectifier

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-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

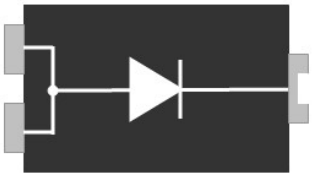
ORDERING INFORMATION

✧Device: GSD15U50SL
✧Package: TO-277B
✧Marking: 15U50
✧Material: Halogen free
✧Packing: Tape & 13'' Reel
✧Quantity per reel: 3,000pcs

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



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	280	A
T_J & T_{STG}	Junction and Storage Temperature	-50~+150	°C

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

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_F	Forward Voltage	I_F = 2A		0.32	0.34	V
		I_F = 8A		0.40	0.42	V
		I_F = 10A		0.42	0.47	V
		I_F = 15A		0.47	0.50	V
V_R	Reverse Breakdown Voltage	I_R = 0.5mA	51			V
I_R	Reverse Leakage Current	V_R = 50V			0.20	mA

ELECTRICAL CHARACTERISTICS CURVE

Fig 1 Typical Forward Current Derating Curve

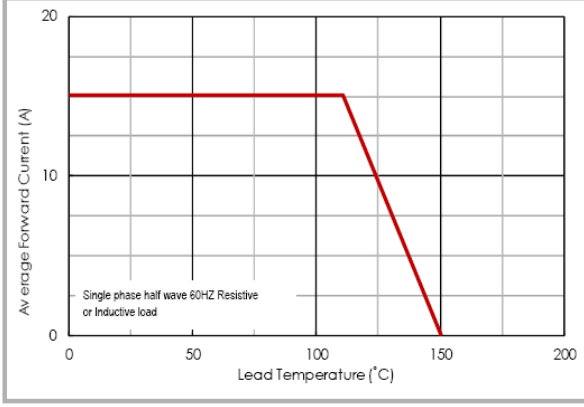


Fig 2 Typical Instantaneous Forward Characteristics

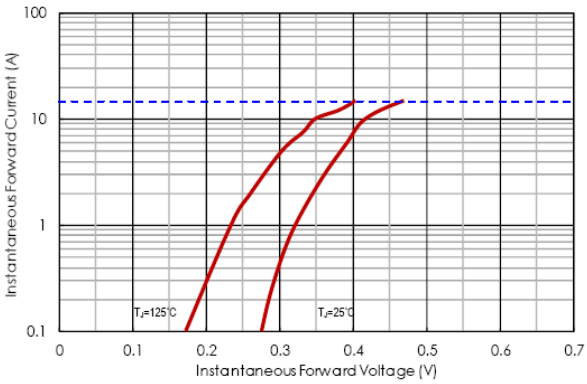


Fig 3 Max. Non-Repetitive Forward Surge Current

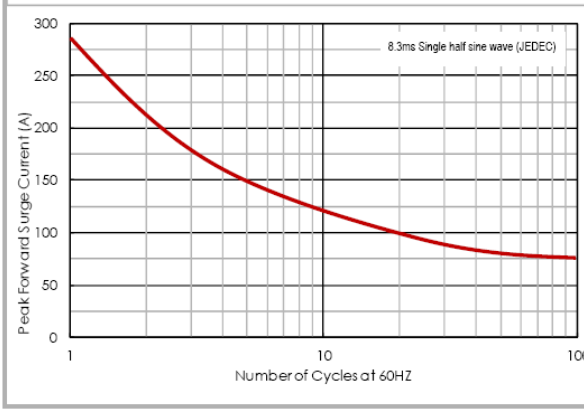
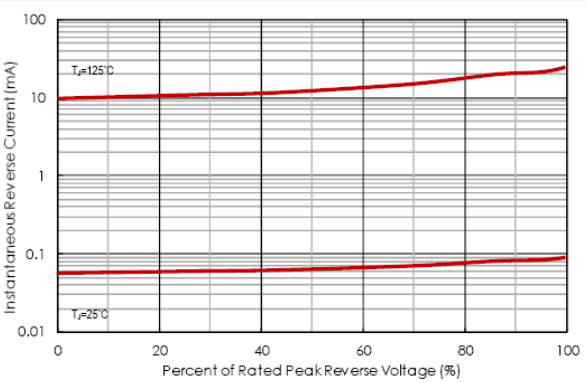
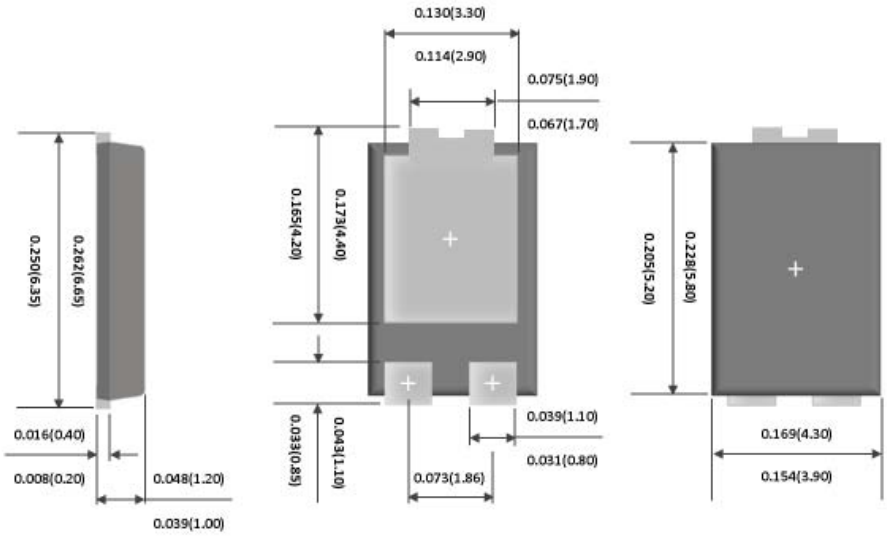


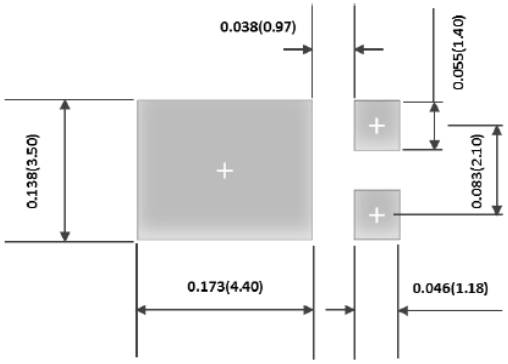
Fig 4 Typical Reverse Characteristics



TO-277B PACKAGE OUTLINE DIMENSIONS



FOOT PRINT RECOMMENDATION



unit: mm