

## FEATURES

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- ✧ 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

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- ✧ Device: GSD15S50SL
- ✧ Package: TO-277B
- ✧ Marking: 15S50
- ✧ Material: Halogen free
- ✧ Packing: Tape & 13" Reel
- ✧ Quantity per reel: 3,000pcs or 5,000pcs

## PIN CONFIGURATION



## MACHANICAL DATA

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- ✧ 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

## APPLICATIONS

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

## PACKAGE OUTLINE





# SD15S50SL

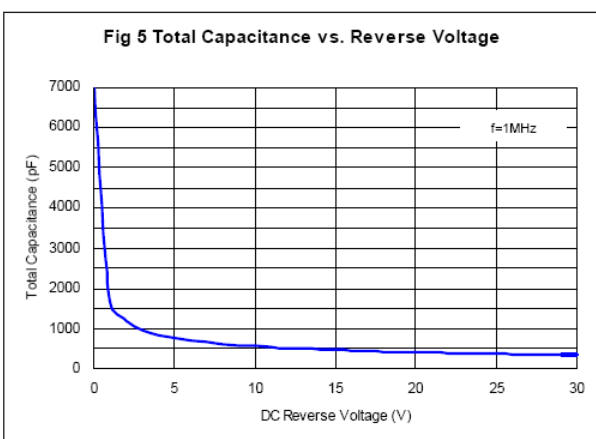
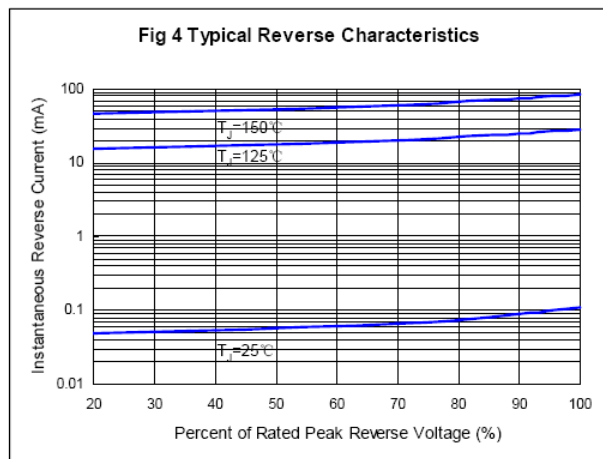
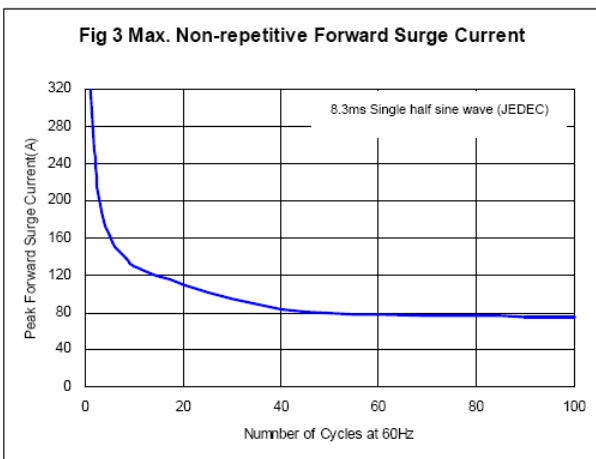
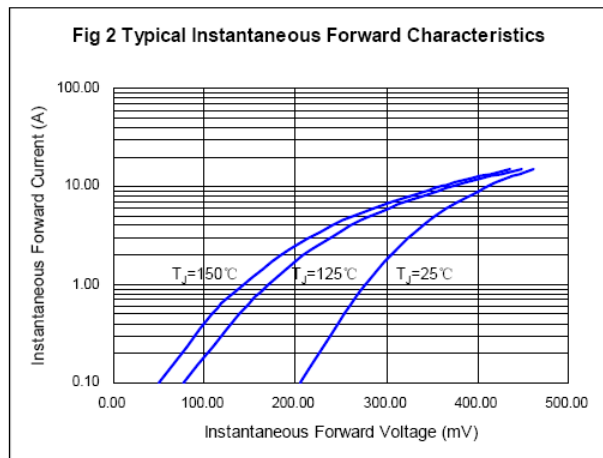
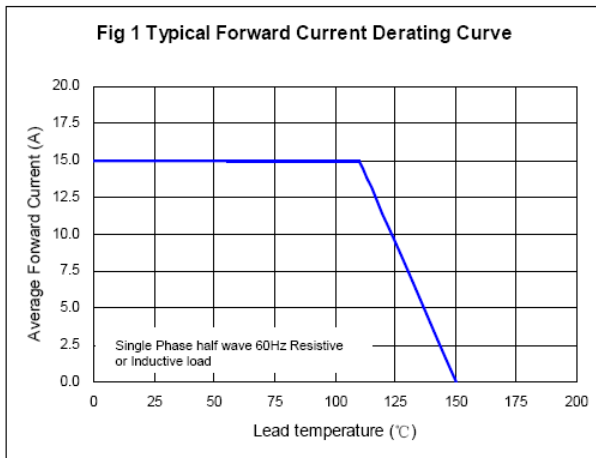
15A/50V Low VF Schottky Rectifier

ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)			
Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	50	V
I <sub>F(AV)</sub>	Average Forward Current	15	A
I <sub>FSM</sub>	Peak Forward Surge Current, 8.3ms single half sine-wave	320	A
T <sub>J</sub> & T <sub>STG</sub>	Junction and Storage Temperature	-50~+150	°C

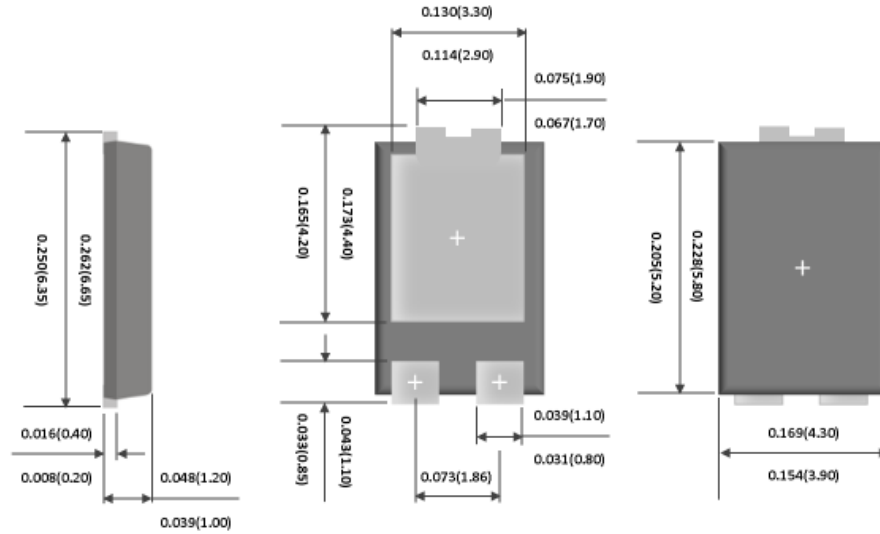
ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)						
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 3A @ 25°C		0.33	0.36	V
		I <sub>F</sub> = 10A @ 25°C		0.41	0.46	V
		I <sub>F</sub> = 15A @ 25°C		0.46	0.51	V
		I <sub>F</sub> = 3A @ 125°C		0.24		V
		I <sub>F</sub> = 10A @ 125°C		0.37		V
		I <sub>F</sub> = 15A @ 125°C		0.44		V
V <sub>R</sub>	Reverse Breakdown Voltage	I <sub>R</sub> = 0.5mA	50			V
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> = 50V @ 25°C			0.280	mA
		V <sub>R</sub> = 50V @ 125°C			50	mA
C <sub>J</sub>	Junction Capacitance	f=1MHz, V <sub>R</sub> =4V		850		pF
R <sub>th(JA)</sub>	Thermal Resistance Junction to Ambient (note 1)			94		°C/W
R <sub>th(JL)</sub>	Thermal Resistance Junction to Lead (note 1)			10		°C/W

Note 1: Units mounted on recommended P.C.B. 1 oz. pad layout

### ELECTRICAL CHARACTERISTICS CURVE

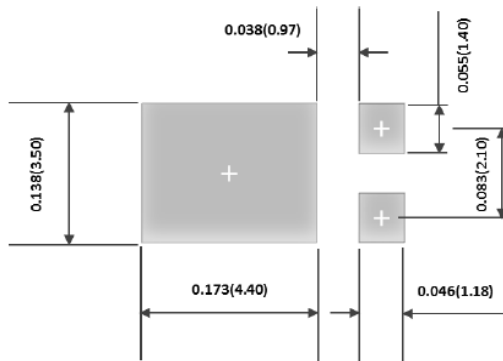


## TO-277B PACKAGE OUTLINE DIMENSIONS



unit: mm

## FOOT PRINT RECOMMENDATION



unit: mm