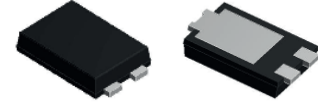


## Features

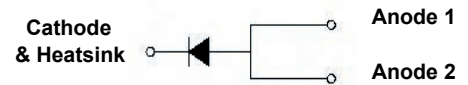
- Excellent high temperature stability
- Low forward voltage
- Low power loss/high efficiency
- High forward surge capability
- Ideal for automated placement
- Compliant to RoHS directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



TO-277B

## Applications

- Case: TO-277B  
 Molding compound meets UL94V-0 flammability rating  
 Moisture sensitivity level: level 1, per J-STD-020
- Terminal: Matte tin plated leads, solderable per JESD22-B102  
 Meet JESD 201 class 2 whisker test



Schematic Diagram

## Applications

Trench Schottky barrier rectifier is designed for high frequency miniature switched mode power supplies such as adapters, lighting and on-board DC/DC converters.

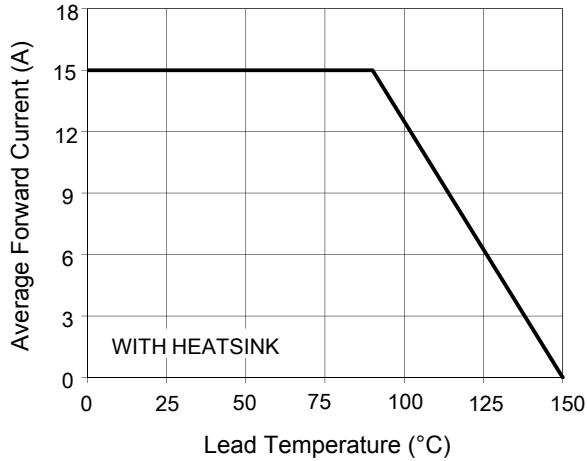
## Maximum Ratings and Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbols	GSP1560L	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	15	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load Per Diode	$I_{FSM}$	260	A
Maximum Instantaneous Forward Voltage at $I_F=15\text{A}$ Per Diode <sup>1</sup>	$T_J=25^\circ\text{C}$ $V_F$	0.55	V
Maximum Instantaneous Reverse Current Per Diode at Rated Reverse Voltage	$T_J=25^\circ\text{C}$ $I_R$	200	$\mu\text{A}$
	$T_J=125^\circ\text{C}$	15	mA
Typical Thermal Resistance	$R_{\theta JL}$	11	$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

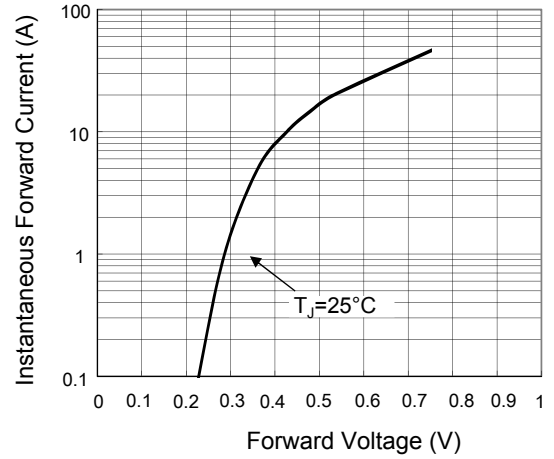
Note:

1. Pulse test with pulse width=300 $\mu\text{s}$ , 1% duty cycle.

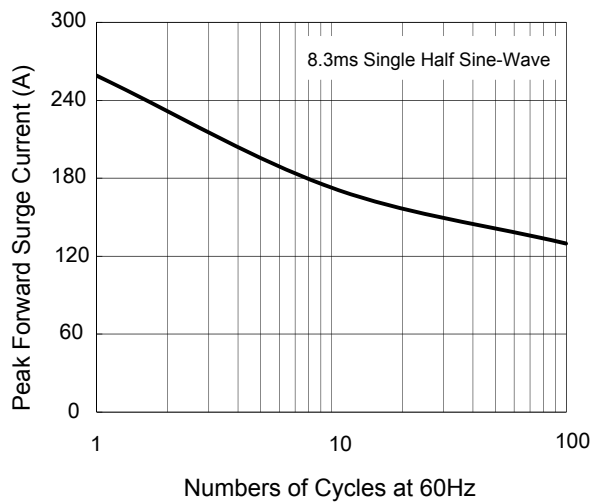
## Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)



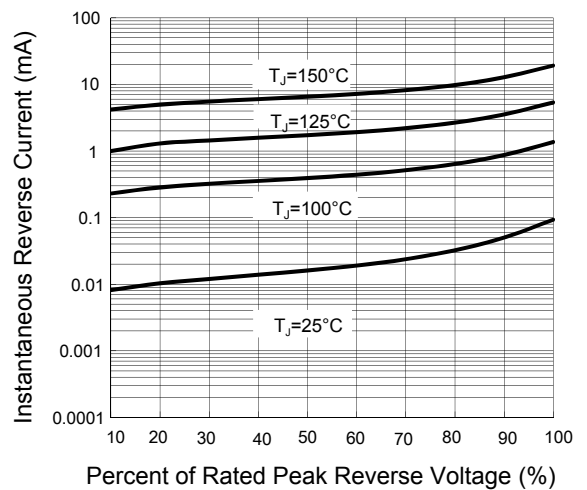
**Figure 1. Forward Current Derating Curve**



**Figure 2. Typical Forward Characteristics**

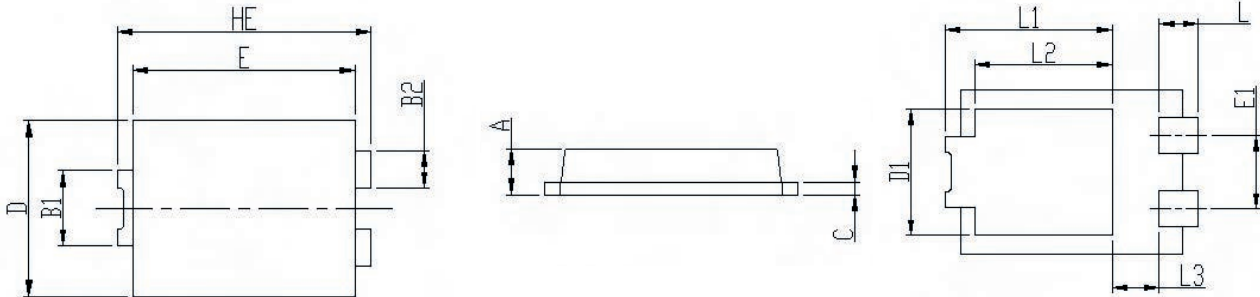


**Figure 3. Maximum Non-Repetitive Forward Surge Current**



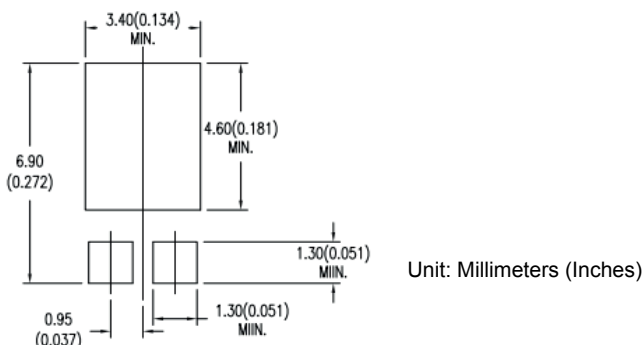
**Figure 4. Typical Reverse Characteristics**

## Package Outline Dimensions (TO-277B)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
HE	6.400	6.600	0.252	0.260
E	5.600	5.800	0.220	0.228
D	4.100	4.300	0.161	0.169
B1	1.700	1.900	0.067	0.075
B2	0.800	1.000	0.031	0.039
A	1.050	1.200	0.041	0.047
C	0.250	0.400	0.010	0.016
L	0.850	1.100	0.033	0.043
L1	4.200	4.400	0.165	0.173
L2	3.520 NOM		0.139 NOM	
L3	1.100	1.400	0.043	0.055
D1	3.000	3.300	0.118	0.130
E1	1.860 TYP		0.073 TYP	

## Recommended Pad Layout



## Order Information

Device	Package	Marking	Carrier	Quantity
GSP1560L	TO-277B	GSP1560L	Tape & Reel	5,000 Pcs / Reel

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)