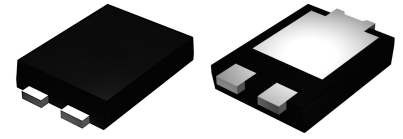
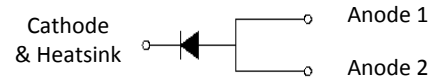


## Features

- 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-277



## Mechanical Data

- Case: TO-277  
 Molding compound meets UL 94V-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

## Absolute Maximum Ratings and Electrical Characteristics

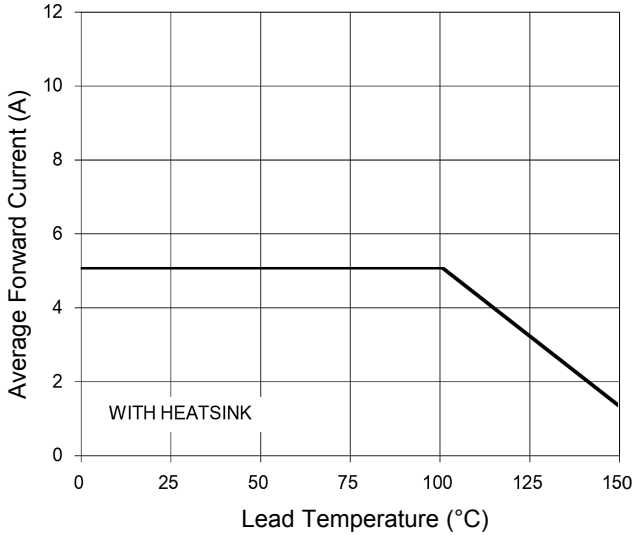
( $T_A=25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage @ $I_F=5A$ , $T_J=25^\circ\text{C}^1$	$V_F$	0.60	V
Maximum Instantaneous Reverse Current at Rated Reverse Voltage ( $T_J=25^\circ\text{C}$ )	$I_R$	30	$\mu\text{A}$
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	$^\circ\text{C}$

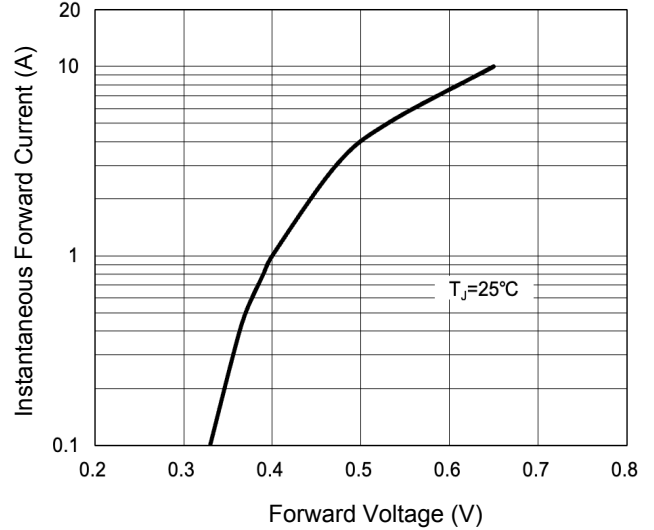
Notes:

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

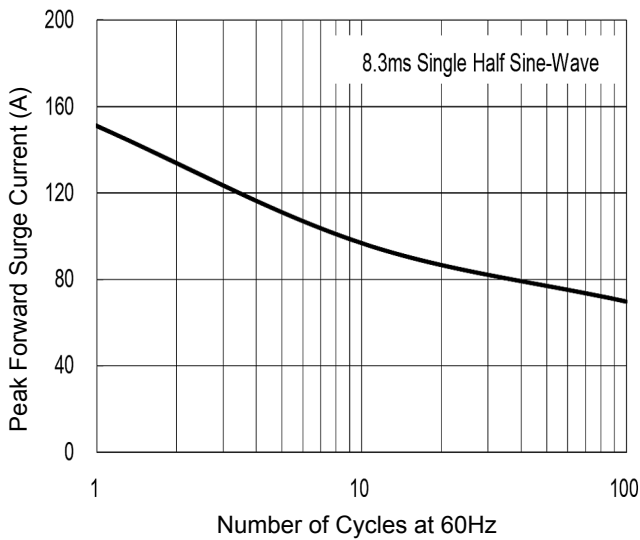
**Ratings and Characteristics Curves** ( $T_A=25^\circ\text{C}$  unless otherwise noted)



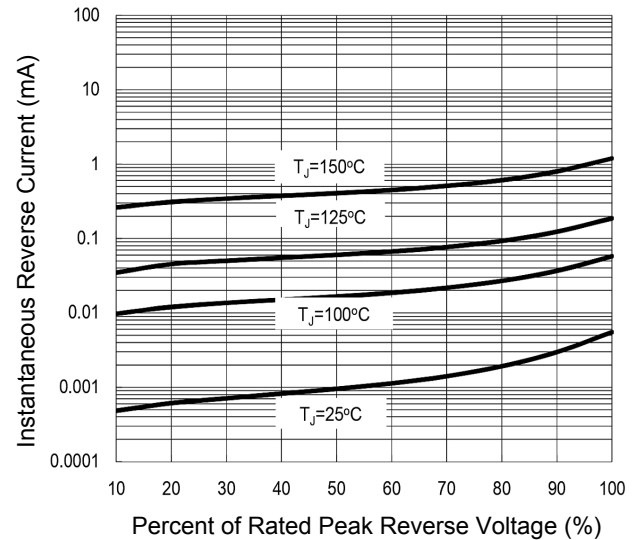
**Figure 1. Forward Current Derating Curve**



**Figure 2. Typical Forward Characteristics**

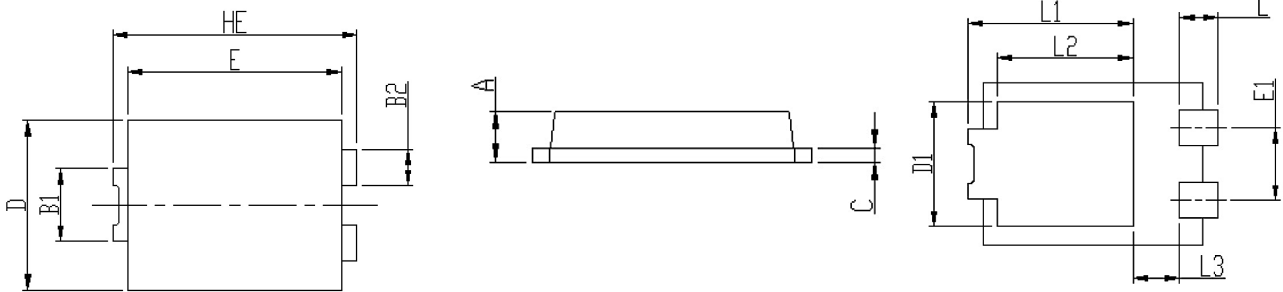


**Figure 3. Maximum Non-Repetitive Forward Surge Current**



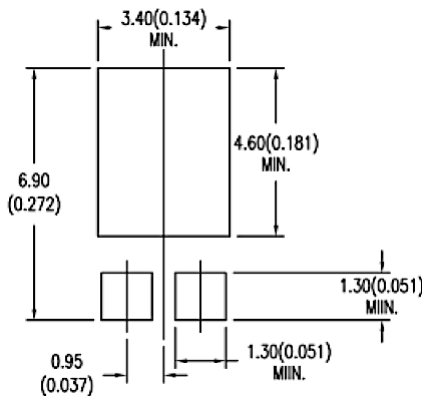
**Figure 4. Typical Reverse Characteristics**

**Package Outline Dimensions (TO-277)**



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 TYP		0.139 TYP	
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**



Dimensions in millimeters and (inches)

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSK05PC100L	TO-277	5PC100	Tape & Reel	5,000 Pcs / Reel

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