

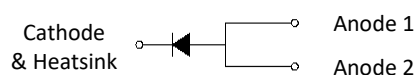
10A 100V Surface Mount Schottky Barrier Diode

Features

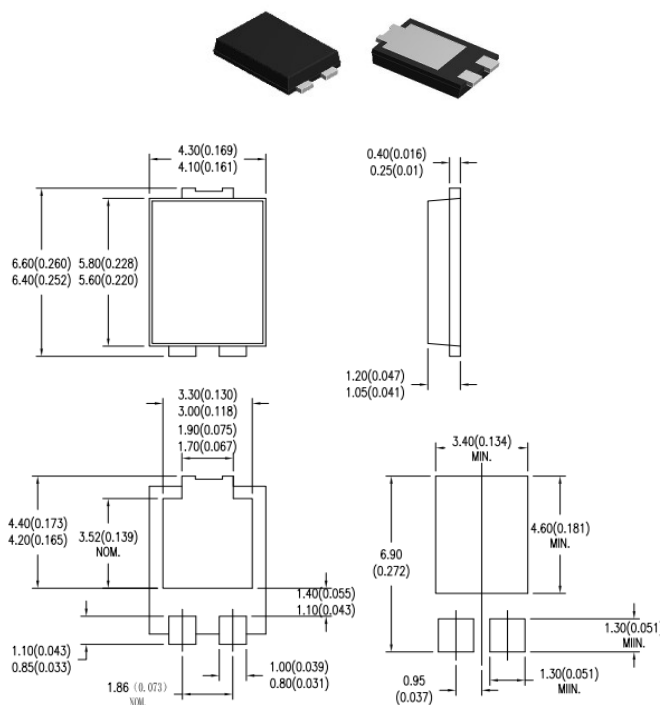
- Excellent high temperature stability
- Low forward voltage
- Low power loss/ high efficiency
- High forward surge capability
- Ideal for automated placement
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

Mechanical Data

- **Case:** TO-277B
Molding compound meets UL 94 V-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
- **Polarity:** Indicated by cathode band



TO-277B



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

Parameter			Symbol	SP10100L	Unit
Maximum repetitive peak reverse voltage			V_{RRM}	100	V
Maximum average forward rectified current			$I_{F(AV)}$	10	A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode			I_{FSM}	200	A
Maximum instantaneous forward voltage per diode (Note 1)	$I_F = 10\text{A}$	$T_J = 25^\circ\text{C}$	V_F	0.65	V
Maximum instantaneous reverse current per diode at rated reverse voltage		$T_J = 25^\circ\text{C}$	I_R	100	μA
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 μs , 1% Duty Cycle



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

FIG.1 FORWARD CURRENT DERATING CURVE

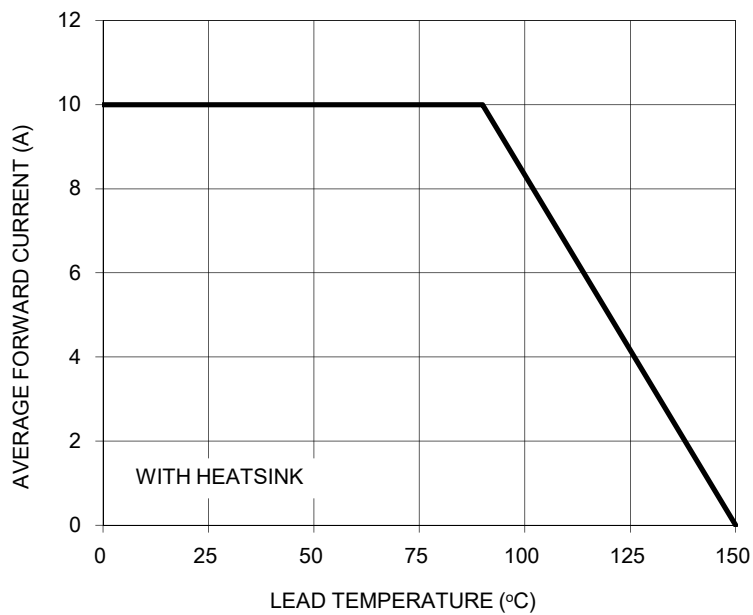


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

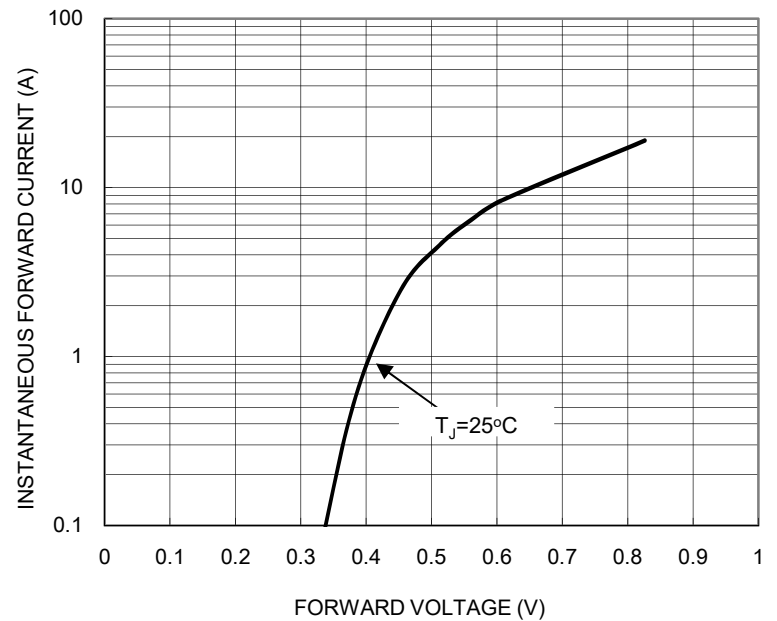


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

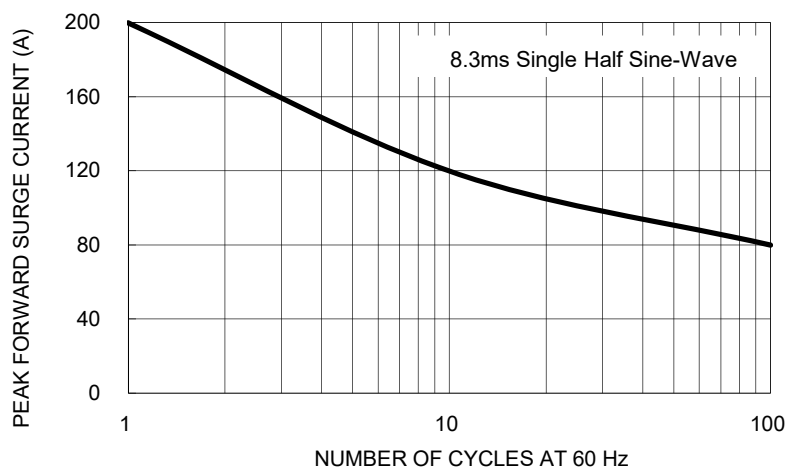


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

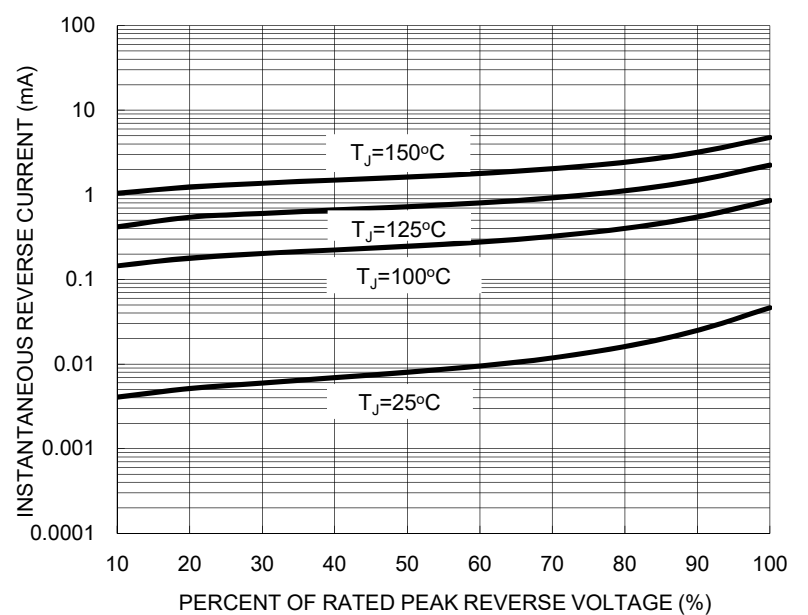


FIG. 5 TYPICAL JUNCTION CAPACITANCE

