

5A, 200V Schottky Rectifiers

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 Cathode Anode 1

& Heatsink

TYPICAL 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.

MECHANICAL DATA

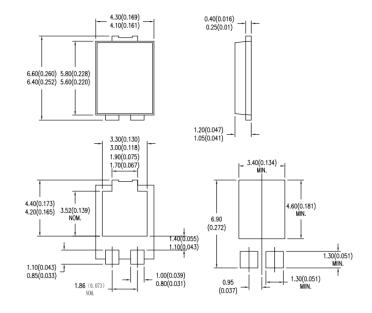
Case: TO-277B

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 **Weight:** 0.095g (approximately)



Anode 2

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)					
PARAMETER			SYMBOL	SP5200	UNIT
Maximum repetitive peak reverse voltage			V_{RRM}	200	V
Maximum average forward rectified current			I _{F(AV)}	5	А
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode			I _{FSM}	120	А
Maximum instantaneous forward voltage per diode (Note 1)	I _F = 5A	T _J = 25°C	V _F	0.90	V
	I _F = 5A	T _J = 125°C		0.82	
		T _J = 25°C	—	10	μА
		T _J = 125°C		0.15	mA
Typical thermal resistance			$R_{ heta JL}$	17	°C/W
Operating temperature range			T_J	- 55 to +150	°C
Storage temperature range			T_{STG}	- 55 to +150	°C

Note 1: Pulse Test with Pulse Width=300µs, 1% Duty Cycle



RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

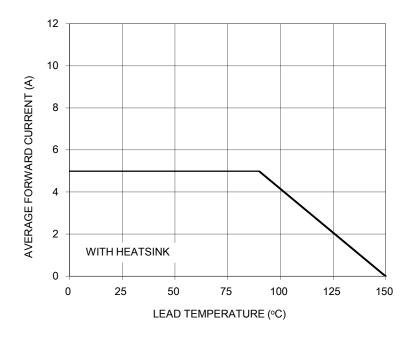


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

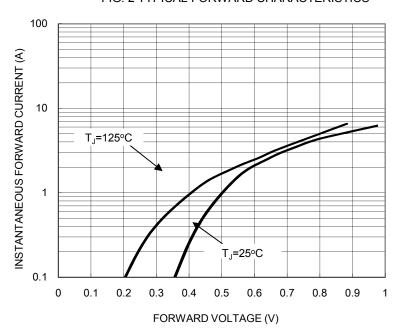


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

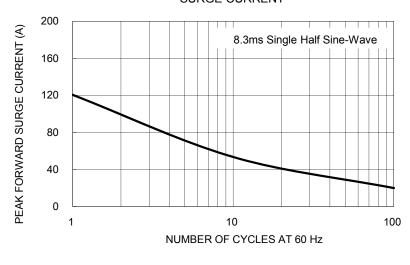


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

