

# 15A,60V Schottky Rectifiers

ROHS

#### **FEATURES**

- Excellent high temperature stability
- Low forward voltage
- Low power loss/ high efficiency
- High forward surge capability
- Ideal for automated placement



# **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**

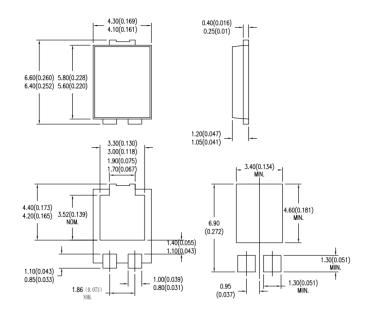
Case: TO-277B

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)



TO-277B

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)					
PARAMETER			SYMBOL	SP1560L-A	UNIT
Maximum repetitive peak reverse voltage			$V_{RRM}$	60	V
Maximum average forward rectified current			I <sub>F(AV)</sub>	15	А
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode			I <sub>FSM</sub>	250	А
Maximum instantaneous forward voltage per diode (Note 1)	I <sub>F</sub> = 15A	T <sub>J</sub> = 25°C	V <sub>F</sub>	0.59	V
per diode at rated reverse voltage $T_J = 12$		T <sub>J</sub> = 25°C	I <sub>R</sub>	200	μΑ
		$T_{\rm J} = 125^{\circ}{\rm C}$		2	mA
Typical thermal resistance			$R_{\theta JL}$	11	°C/W
Operating temperature range			T <sub>J</sub>	- 55 to +150	°C
Storage temperature range			T <sub>STG</sub>	- 55 to +150	°C

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



## **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

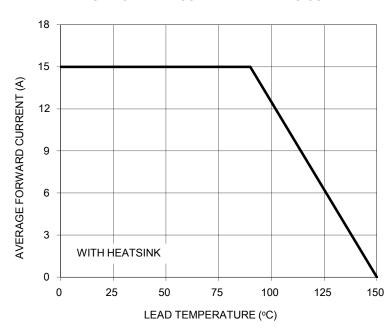


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

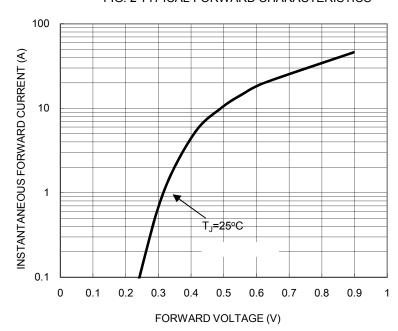


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

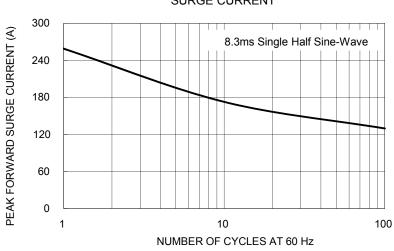


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

