

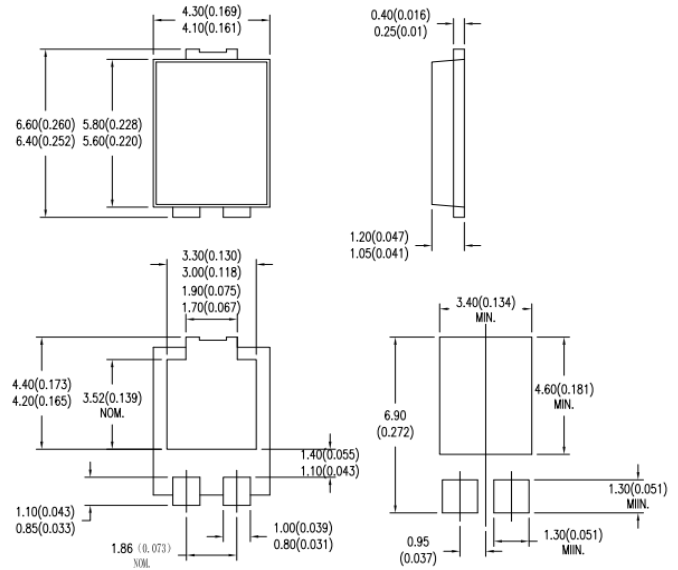
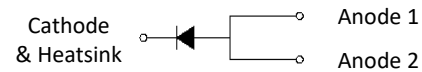
5A, 300V Schottky Rectifiers

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



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)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)					
PARAMETER	SYMBOL	SP5300L		UNIT	
Maximum repetitive peak reverse voltage	V _{RRM}	300		V	
Maximum average forward rectified current	I _{F(AV)}	5		A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode	I _{FSM}	120		A	
Maximum instantaneous forward voltage per diode (Note 1)	V _F	I _F = 5A	T _J = 25°C	0.88	V
		I _F = 5A	T _J = 125°C	0.78	
Maximum instantaneous reverse current per diode at rated reverse voltage	I _R	T _J = 25°C		10	μA
		T _J = 125°C		15	mA
Typical thermal resistance	R _{θJL}	3.0		°C/W	
Operating temperature range	T _J	- 55 to +175		°C	
Storage temperature range	T _{STG}	- 55 to +175		°C	

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

RATINGS AND CHARACTERISTICS CURVES

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

FIG.1 FORWARD CURRENT DERATING CURVE

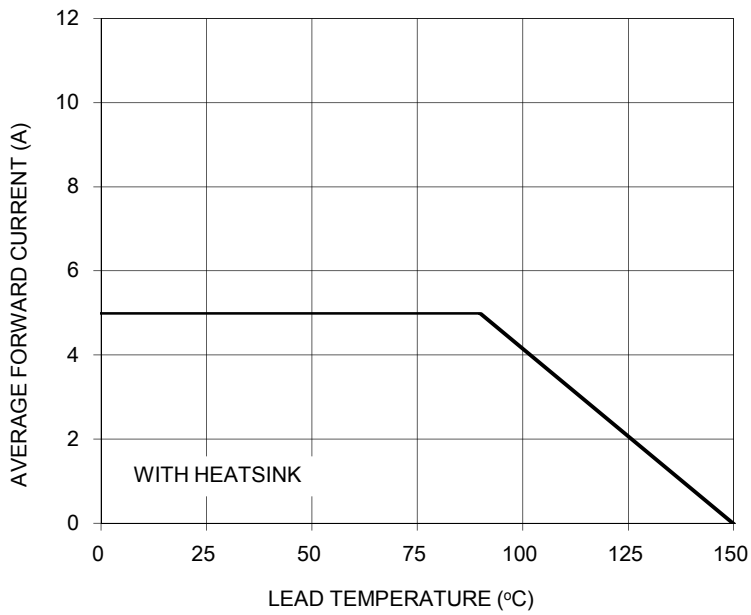


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

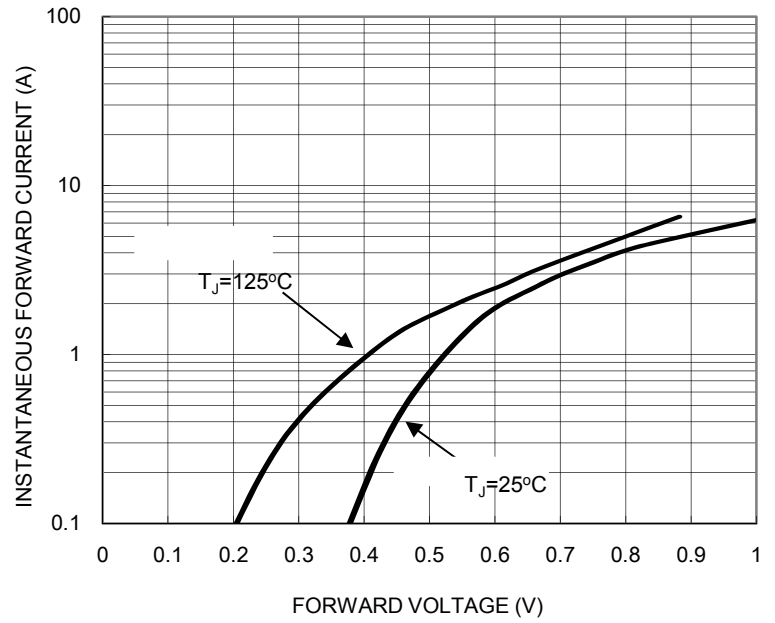


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

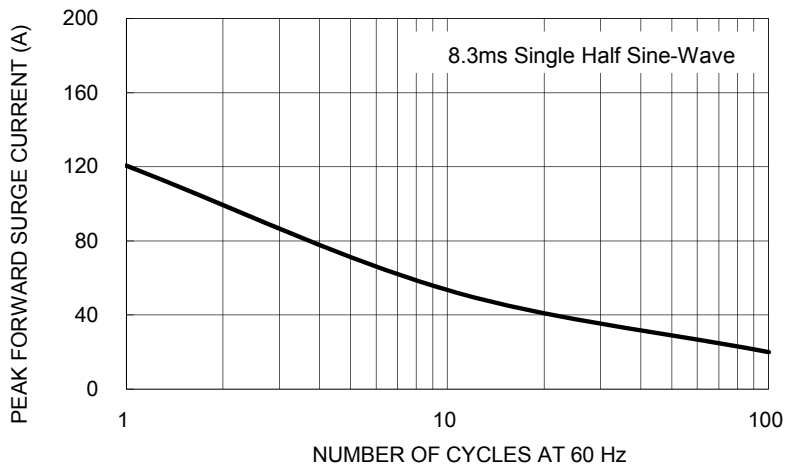


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

