

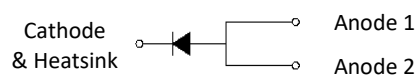
12A 120V Surface Mount Schottky Barrier Diode

Features

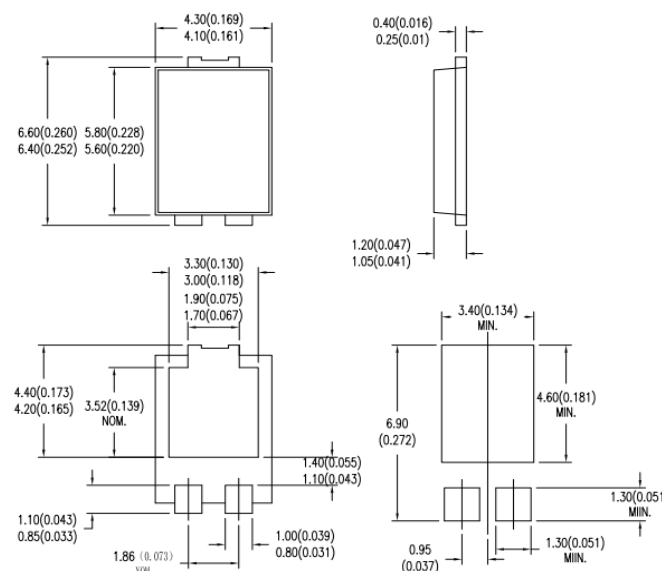
- Excellent high temperature stability
- Low forward voltage
- Low power loss/ high efficiency
- Ideal for automated placement
- High forward surge capability
- Compliant with RoHS standards, halogen-free

Mechanical Data

- Case: TO-277B
- Polarity: Indicated by cathode band
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position: Any



TO-277B



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

Parameter			Symbol	SP12120L	Unit
Maximum repetitive peak reverse voltage			V _{RRM}	120	V
Maximum average forward rectified current			I _{F(AV)}	12	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 = 12A	T _J = 25°C	V _F	0.80	V
	I _F = 12A	T _J = 125°C		0.73	
Maximum instantaneous reverse current per diode at rated reverse voltage		T _J = 25°C	I _R	50	μA
		T _J = 125°C		2	mA
Typical thermal resistance			R _{θJL}	11	°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=300 μs , 1% Duty Cycle



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

FIG.1 FORWARD CURRENT DERATING CURVE

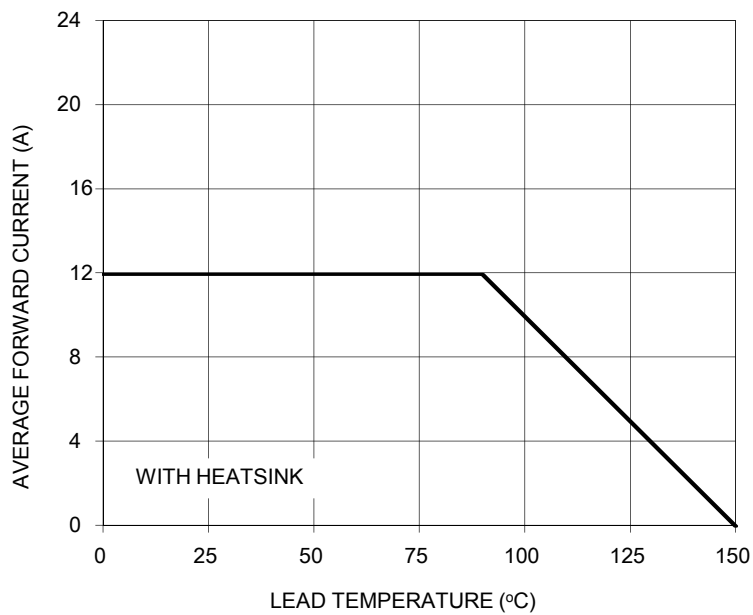


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

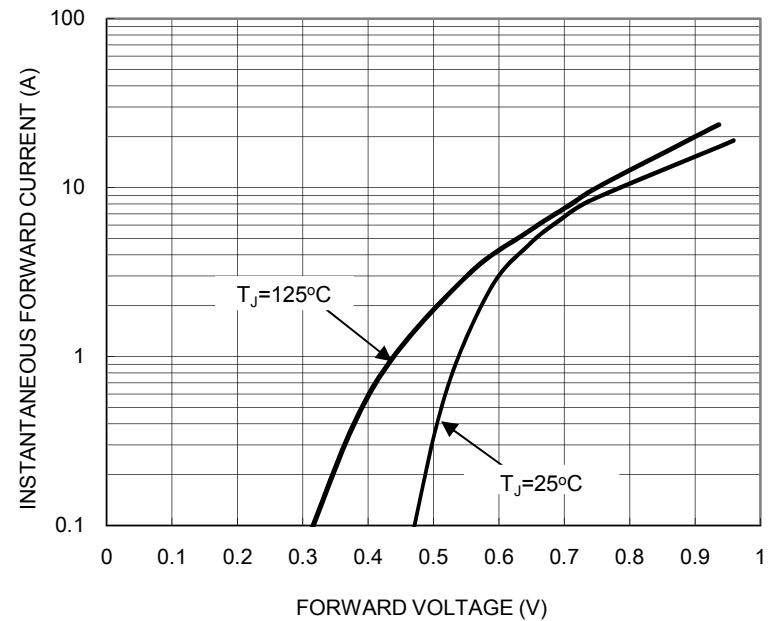


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

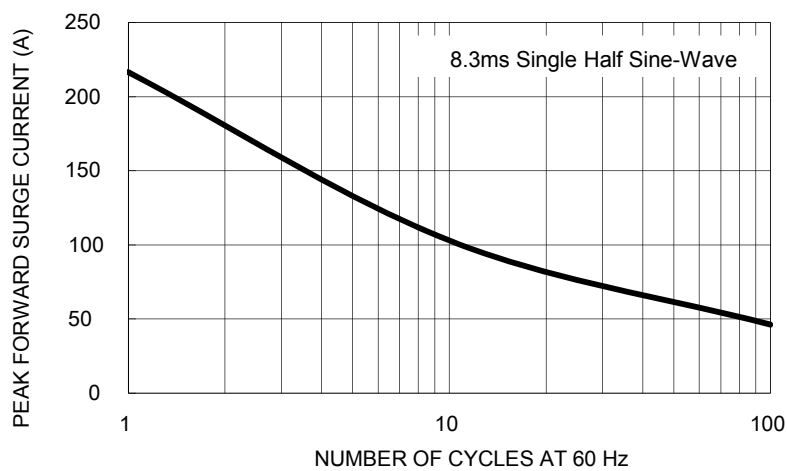


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

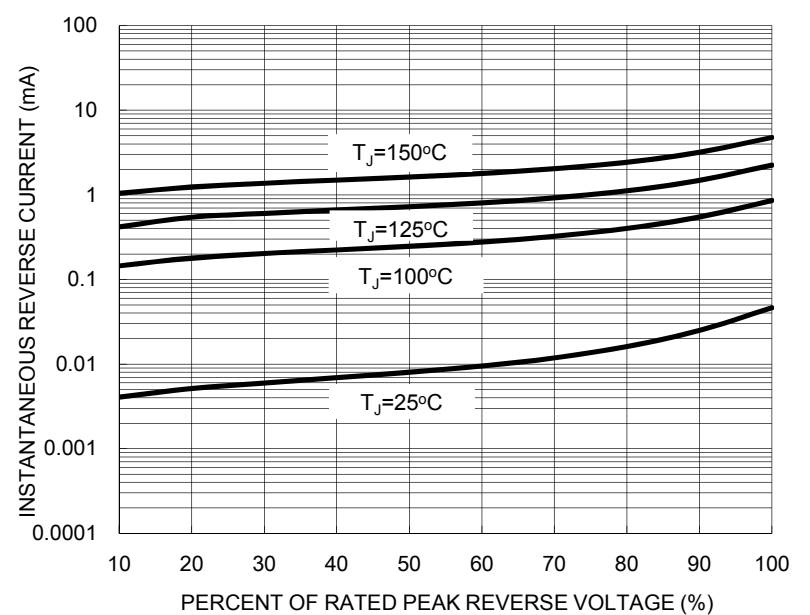


FIG. 5 TYPICAL JUNCTION CAPACITANCE

