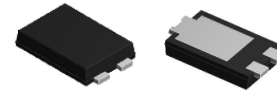


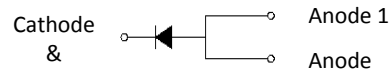
10A Surface Mount Schottky Rectifier

Features

- Low forward voltage drop, low power losses
- Low leakage current
- High efficiency
- Very low profile - typical height of 1.1 mm
- Heatsink design
- Halogen-free according to IEC 61249-2-21 definition
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



TO-277B



Typical Applications

For low voltage high frequency inverters, DC/DC converters and polarity protection and polarity protection application.

Mechanical Data

Case: TO-277B

Molding compound meets UL 94 V-0 flammability

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

Ordering Information

Part Number	Qualification	Case	Packaging
SB10150-A	Commercial	TO-277B	5000/Tape & Reel

Maximum Ratings (TA = 25 °C unless otherwise noted)			
Parameter	Symbol	SB10150-A	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	150	V
Maximum RMS voltage	V _{RMS}	105	V
Maximum DC blocking voltage	V _{DC}	150	V
Maximum average forward rectified current	I _{F(AV)} ¹⁾	10	A
	I _{F(AV)} ²⁾	5	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	180	A
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +175	°C

Notes:

1) The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 30×30mm copper pads, 2 OZ, FR4 PCB.

2): Mounted on recommended copper pad area, free air.



Electrical Characteristics (TA = 25 °C unless otherwise noted)					
Parameter	Test Conditions		Symbol	Max	Unit
Maximum instantaneous forward voltage	IF=10A	TA=25°C		0.90	Volts
Maximum DC reverse current at rated DC blocking voltage	Rated VR	TA=25°C	IR	0.2	mA
		TA=100°C		10	mA
Typical thermal resistance ¹⁾	junction to ambient		RθJA	110	°C/W
	junction to case		RθJC	65	
	junction to mount		RθJM	40	

Ratings and Characteristics Curves

FIG.1 FORWARD CURRENT DERATING CURVE

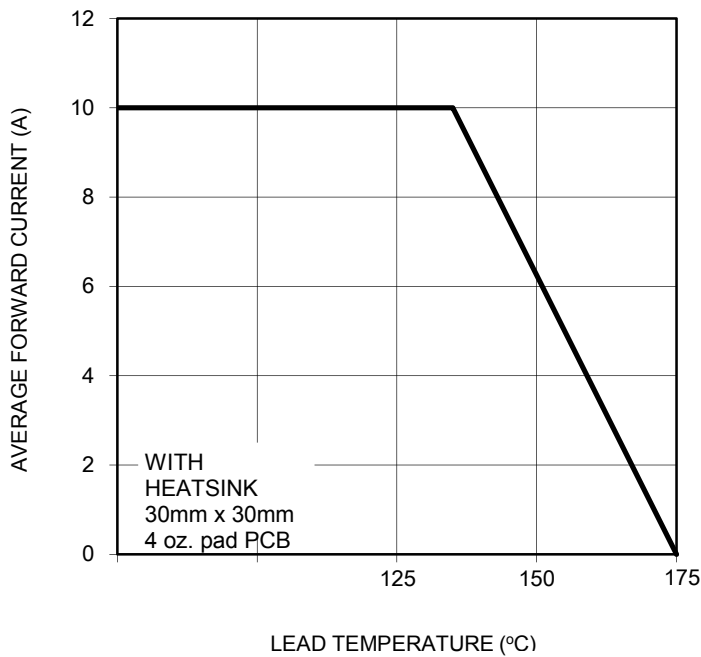


FIG.2 TYPICAL FORWARD CHARACTERISTICS

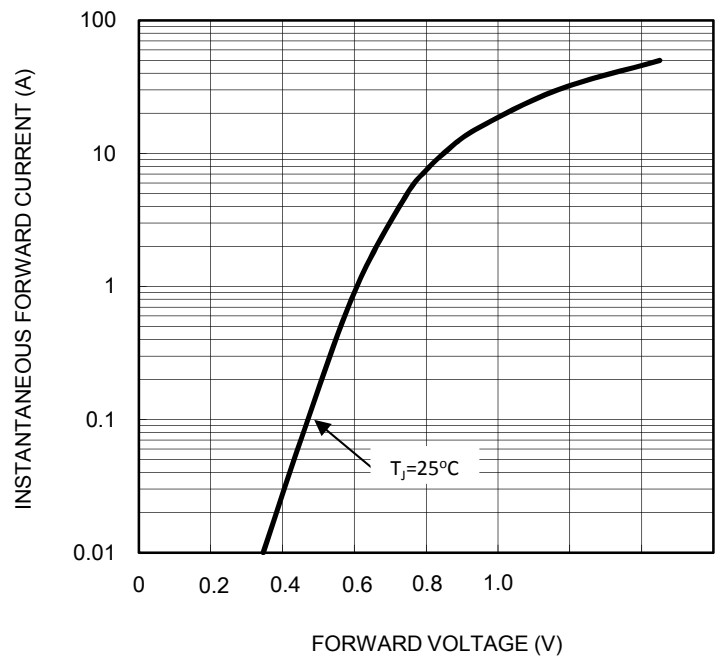


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

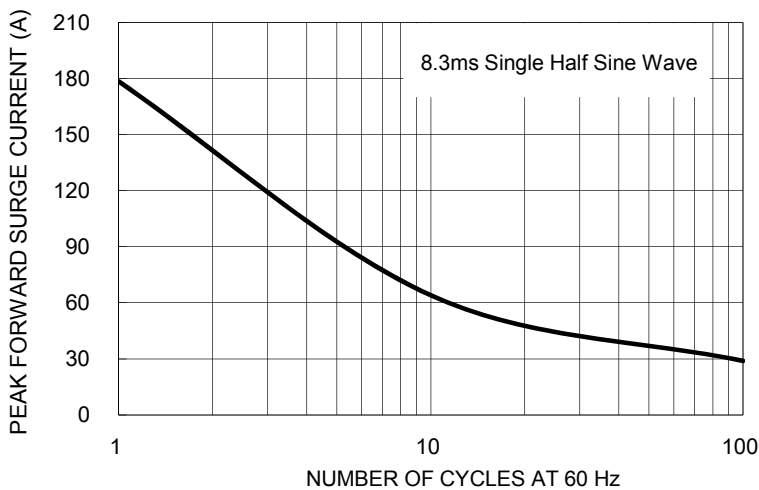
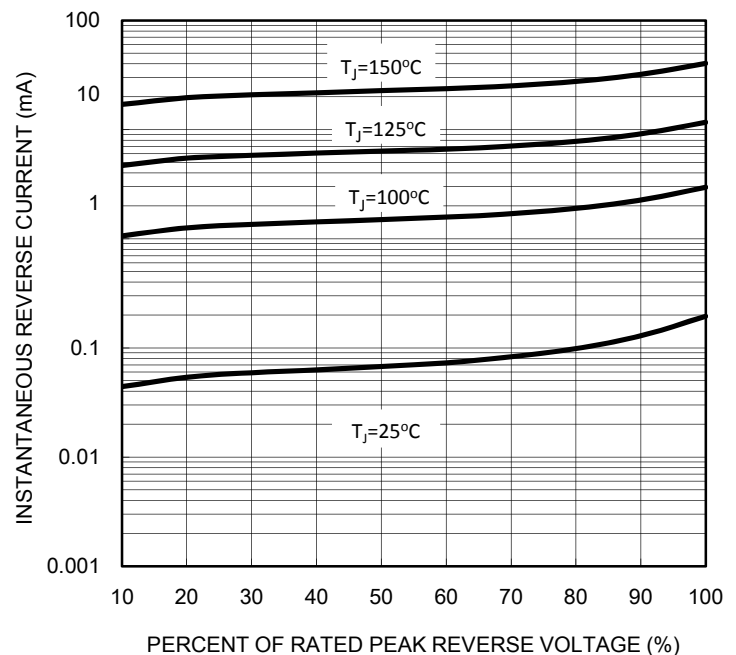


FIG.4 TYPICAL REVERSE CHARACTERISTICS





Package Outline Dimensions in millimeters (inches)

