

# FBR130

## Schottky Rectifier

### Features

- 1 Ampere, low forward voltage, less than 500mV
- Compact surface mount package with the same footprint as mini-melf
- Maximum package height of 0.8mm.



**SOD-123F**  
Color Band Denotes Cathode  
Mark: 130

### Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	30	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	1	A
I <sub>FSM</sub>	Non Repetitive Peak Forward Current (Surge applied at rated load conditions half wave, single, phase, 60Hz)	5.5	A
T <sub>STG</sub>	Storage Temperature Range	-65 to +150	°C
T <sub>Jmax</sub>	Operating Junction Temperature	-65 to +125	°C

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

Symbol	Parameter	Value	Units
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient *	73	°C/W
R <sub>θJL</sub>	Thermal Resistance, Junction to Lead *	23	°C/W

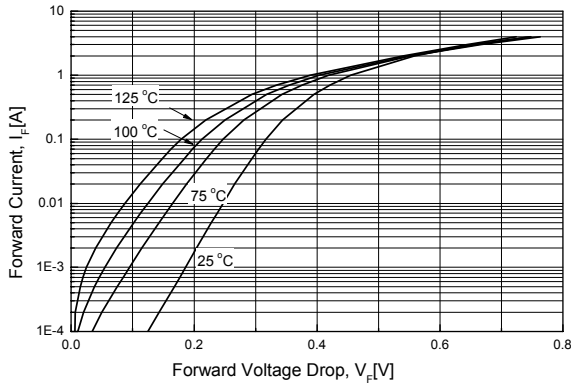
\* FR-4 = 3.0 × 5.5 × 0.062" using 1.0 × 0.5" land pads.

### Electrical Characteristics T<sub>C</sub> = 25°C unless otherwise noted

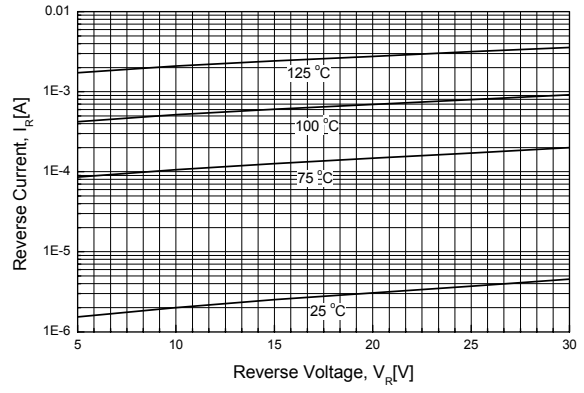
Symbol	Parameter	Value	Units
V <sub>F</sub>	Forward Voltage	@ I <sub>F</sub> = 500mA	0.45
		I <sub>F</sub> = 1000mA	0.5
I <sub>R</sub>	Reverse Current	@V <sub>R</sub> = 15V	100
		V <sub>R</sub> = 30V	200

## Typical Performance Characteristics

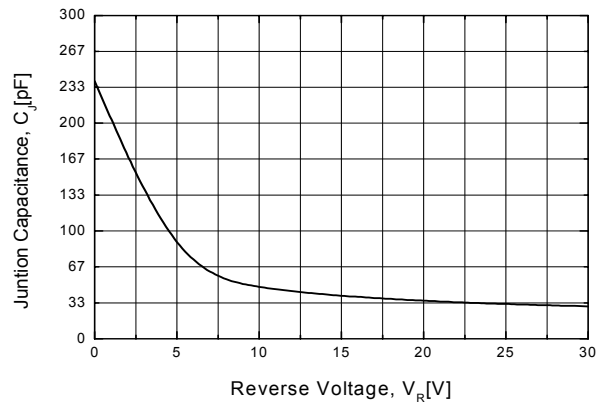
**Figure 1. Forward Voltage Characteristics**



**Figure 2. Reverse Current vs Reverse Voltage**

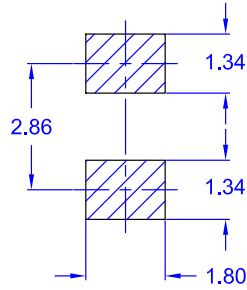
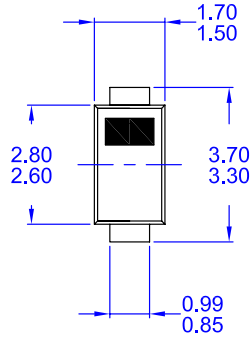


**Figure 3. Total Capacitance**

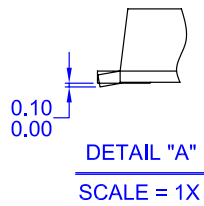
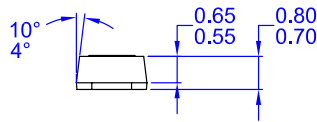
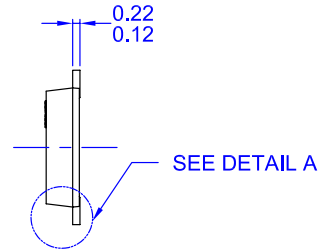
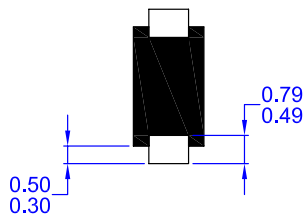


Typical Performance Characteristics

SOD-123F



LAND PATTERN RECOMMENDATION



NOTES: UNLESS OTHERWISE SPECIFIED  
 A) THIS PACKAGE DOES NOT COMPLY TO ANY CURRENT PACKAGING STANDARD.  
 B) ALL DIMENSIONS ARE IN MILLIMETERS.  
 C) DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.

Dimensions in Millimeters

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EcoSPARK™	I <sup>2</sup> C™	MSXPro™	RapidConnect™	UniFET™
E <sup>2</sup> C MOS™	i-Lo™	OCX™	μSerDes™	VCX™
EnSigna™	ImpliedDisconnect™	OCXPro™	SILENT SWITCHER®	Wire™
FACT™	IntelliMAX™	OPTOLOGIC®	SMART START™	
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Programmable Active Droop™		Power247™	SuperSOT™-3	
		PowerEdge™	SuperSOT™-6	

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