



# 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 I <sub>F</sub> = 1000mA	0.45 0.5	V V
I <sub>R</sub>	Reverse Current @ V <sub>R</sub> = 15V V <sub>R</sub> = 30V	100 200	μA μA



## Typical Performance Characteristics

Figure 1. Forward Voltage Characteristics

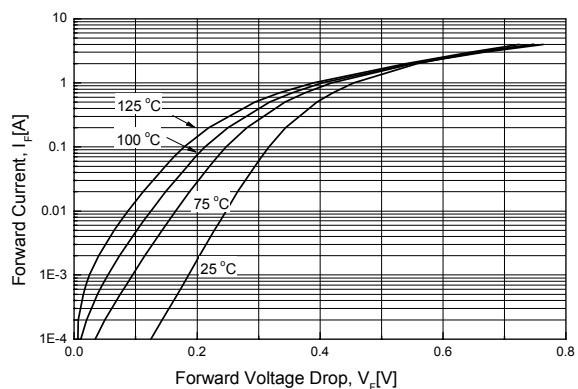


Figure 2. Reverse Current vs Reverse Voltage

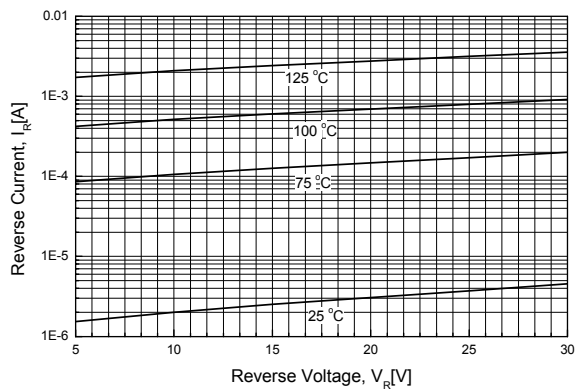
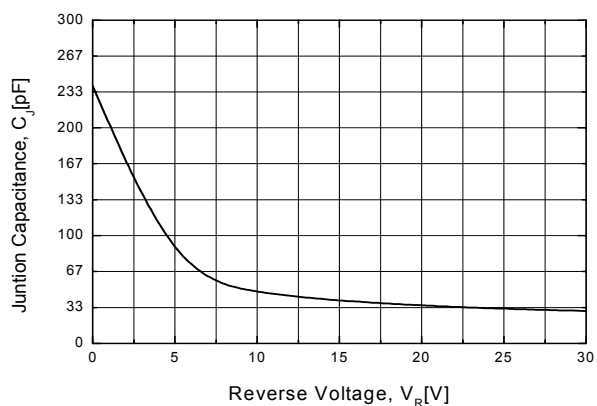
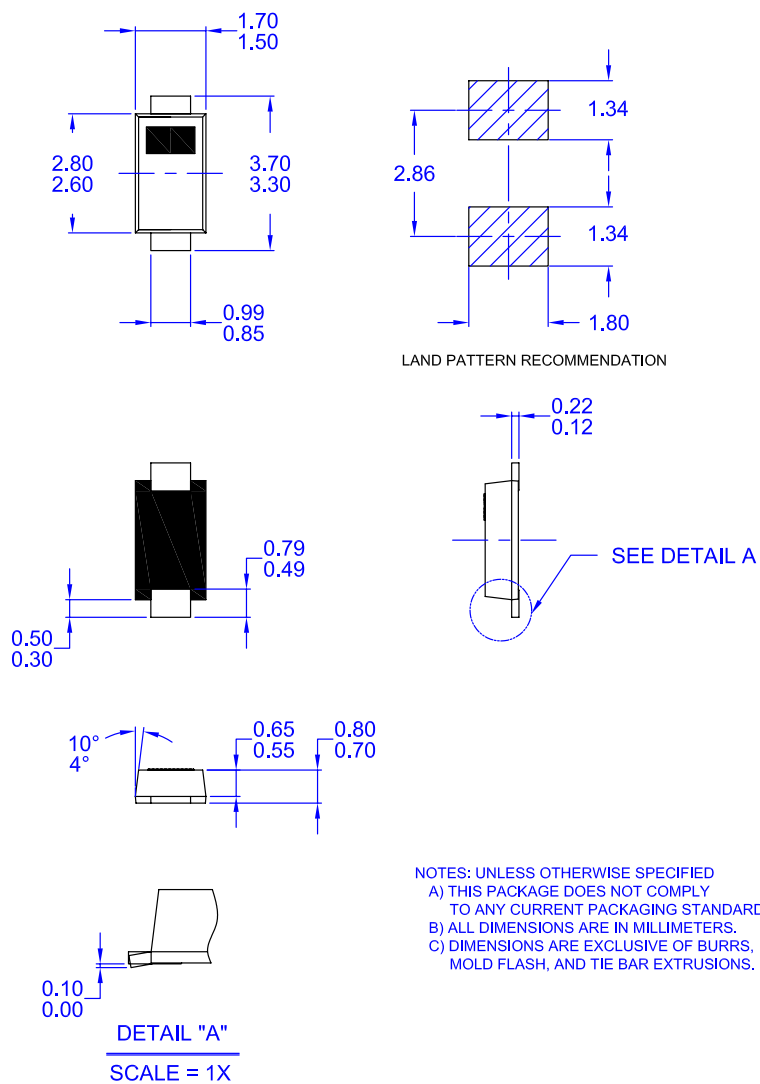


Figure 3. Total Capacitance



## Typical Performance Characteristics

## SOD-123F



Dimensions in Millimeters

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EcoSPARK™	I <sup>2</sup> C™	MSXPro™	RapidConnect™	UniFET™
E <sup>2</sup> CMOS™	i-Lo™	OCX™	μSerDes™	VCX™
EnSigna™	ImpliedDisconnect™	OCXPro™	SILENT SWITCHER®	Wire™
FACT™	IntelliMAX™	OPTOLOGIC®	SMART START™	
FACT Quiet Series™		OPTOPLANAR™	SPM™	
Across the board. Around the world.™		PACMAN™	Stealth™	
The Power Franchise®		POP™	SuperFET™	
Programmable Active Droop™		Power247™	SuperSOT™-3	
		PowerEdge™	SuperSOT™-6	

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