

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 * Ta = 25°C unless otherwise noted

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

^{*} These ratings are limiting values above which the serviceability of any semiconductor device may by impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient *	73	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead *	23	°C/W

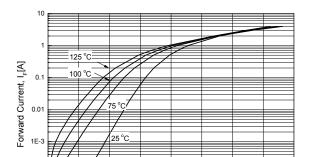
^{*} FR-4 = $3.0 \times 5.5 \times 0.062$ " using 1.0×0.5 " land pads.

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol		Parameter	Value	Units
V _F	Forward Voltage	@ I _F = 500mA I _F = 1000mA	0.45 0.5	V V
I _R	Reverse Current	@V _R = 15V V _R = 30V	100 200	μ Α μ Α

Typical Performance Characteristics

Figure 1. Forward Voltage Characteristics



Forward Voltage Drop, $V_{F}[V]$

Figure 2. Reverse Current vs Reverse Voltage

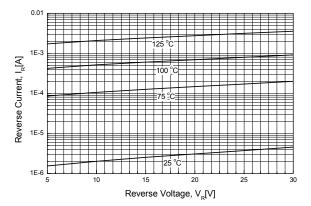
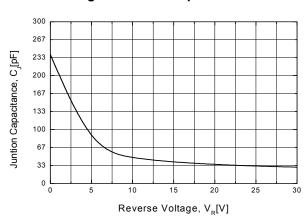
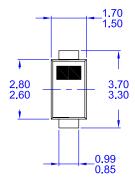


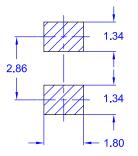
Figure 3. Total Capacitance



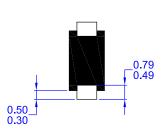
Typical Performance Characteristics

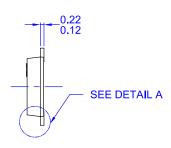
SOD-123F

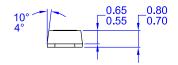


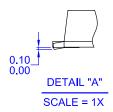


LAND PATTERN RECOMMENDATION









NOTES: UNLESS OTHERWISE SPECIFIED
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B) ALL DIMENSIONS ARE IN MILLIMETERS.
C) DIMENSIONS ARE EXCLUSIVE OF BURRS,
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Dimensions in Millimeters

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