

MBR0530

Schottky Rectifier

Features

- 0.5 Ampere, low forward voltage, less than 430mV
- Compact surface mount package with the same footprint as mini-melf



SOD123 Color Band Denotes Cathode Mark: B3

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	500	mA
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 *	206	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead	173	°C/W

^{* 1} inch square pad size on FR-4 board.

Electrical Characteristics $T_C = 25$ °C unless otherwise noted

Symbol	Parameter		Value	Units
V _F	Forward Voltage	@ $I_F = 100$ mA $I_F = 100$ mA, $T_A = 100$ °C $I_F = 500$ mA $I_F = 500$ mA, $T_A = 100$ °C	375 340 430 420	mV mV mV mV
I _R	Reverse Current	@ $V_R = 15V$ $V_R = 30V$ $V_R = 30V$, $T_a = 100$ °C	20 130 5	μΑ μΑ mA

Typical Performance Characteristics

Figure 1. Forward Voltage Characteristics

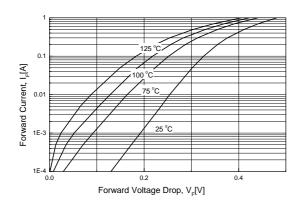


Figure 2. Reverse Current vs Reverse Voltage

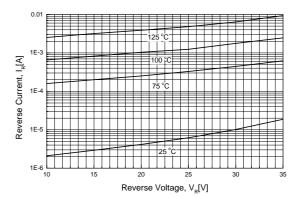
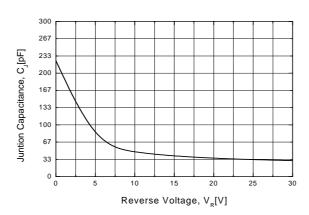


Figure 3. Total Capacitance



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FACT Quiet Series™		OPTOPLANAR™	SMART START™	
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