

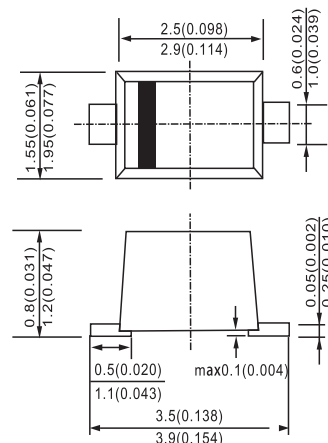
FEATURES

- Guardring for stress protection
- Optimized for very low forward voltage
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0168 gram
- Marking code : RC

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
Average Rectified Forward Current (At Rated V_R , $T_L=115^\circ\text{C}$)	I_o	1.0	A
Non-Repetitive Peak Surge Current (Non-Repetitive peak current, halfwave, single phase, 60Hz)	I_{FSM}	50	A
Voltage Rate of Change (Rated V_R , $T_J=25^\circ\text{C}$)	dv/dt	10,000	V/ μs
Storage Temperature	T_{STG}	-55 to + 150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to + 125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	$T_J=25^\circ\text{C}$	$T_J=85^\circ\text{C}$	UNITS
Maximum Instantaneous Forward Voltage (Note3), See Figure 2 $I_F=0.1\text{A}$ $I_F=1.0\text{A}$ $I_F=3.0\text{A}$	V_F	0.340 0.450 0.650	0.260 0.415 0.670	V
Maximum Instantaneous Reverse Current (Note3), See Figure 4 ($V_R=20\text{V}$) ($V_R=10\text{V}$)	I_R	0.40 0.10	25 18	mA

1. Pulse Test : Pulse Width $\leq 250\mu\text{s}$, Duty Cycle $\leq 2\%$

RATINGS AND CHARACTERISTIC CURVES

MBR1020 LL

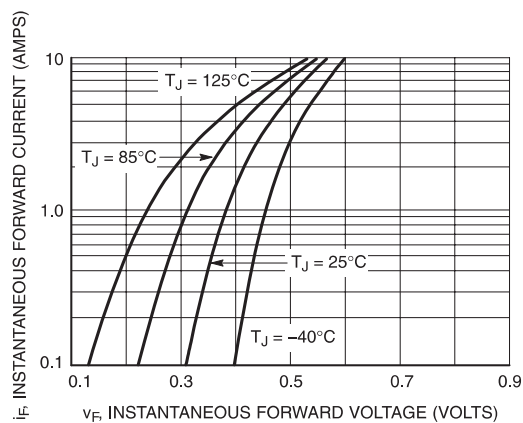


Figure 1. Typical Forward Voltage

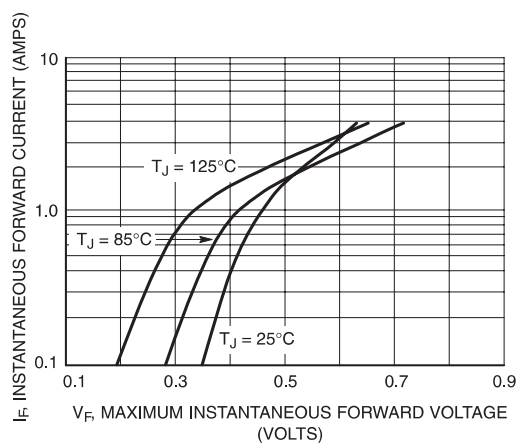


Figure 2. Maximum Forward Voltage

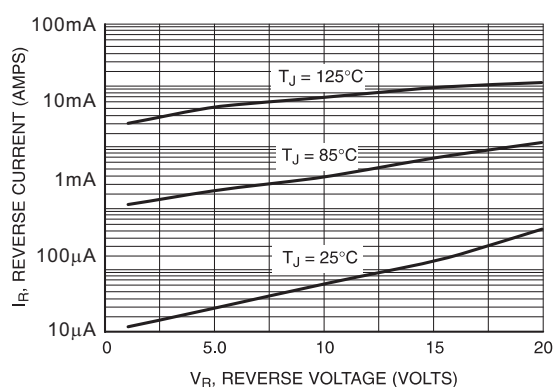


Figure 3. Typical Reverse Current

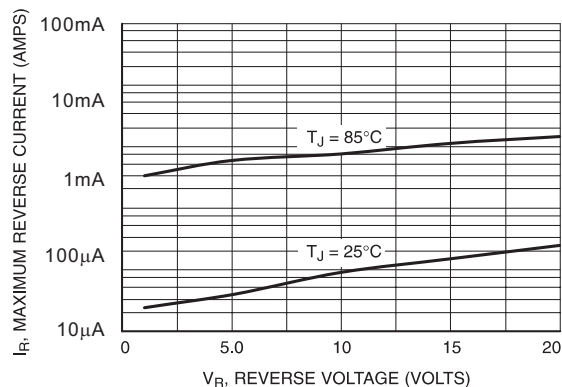


Figure 4. Maximum Reverse Current

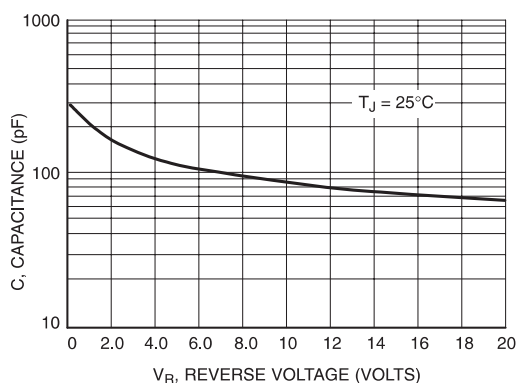


Figure 5. Capacitance