

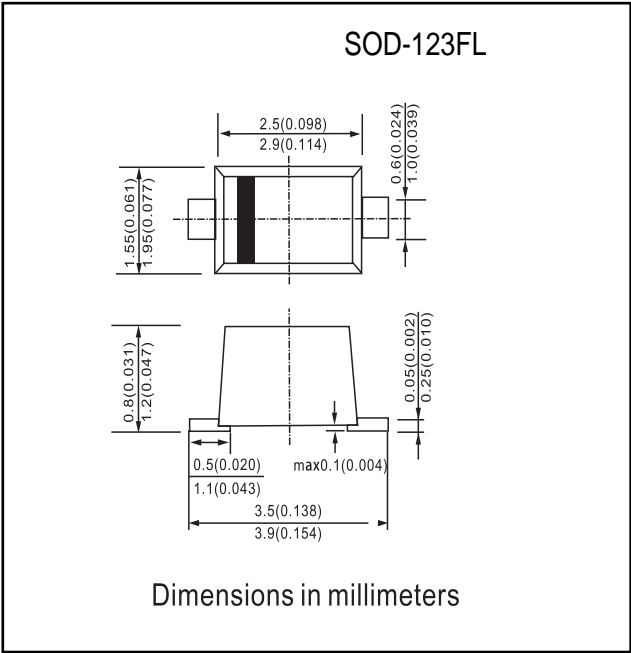


**FEATURES**

- 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



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

**MAXIMUM RATINGS**

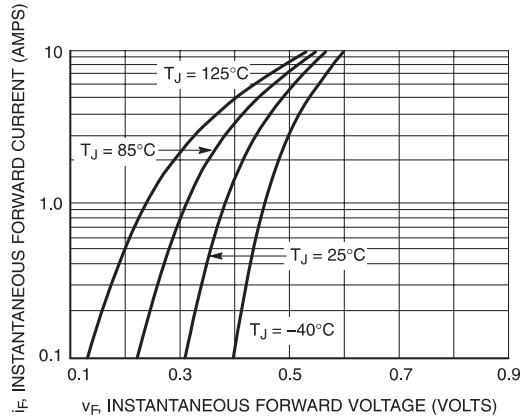
RATING	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	V
Average Rectified Forward Current (At Rated $V_R, T_L=115^{\circ}C$ )	$I_o$	1.0	A
Non-Repetitive Peak Surge Current (Non-Repetitive peak current, halfwave, single phase, 60Hz)	$I_{FSM}$	50	A
Voltage Rate of Change (Rated $V_R, T_J=25^{\circ}C$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

**ELECTRICAL CHARACTERISTICS**

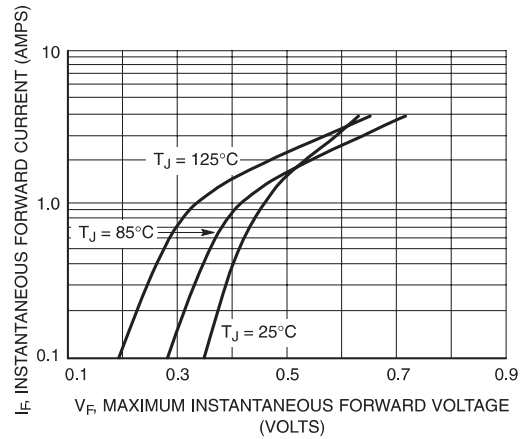
CHARACTERISTIC	SYMBOL	$T_J=25^{\circ}C$	$T_J=85^{\circ}C$	UNITS
Maximum Instantaneous Forward Voltage (Note3), See Figure 2 $I_F=0.1A$ $I_F=1.0A$ $I_F=3.0A$	$V_F$	0.340 0.450 0.650	0.260 0.415 0.670	V
Maximum Instantaneous Reverse Current (Note3), See Figure 4 ( $V_R=20V$ ) ( $V_R=10V$ )	$I_R$	0.40 0.10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

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

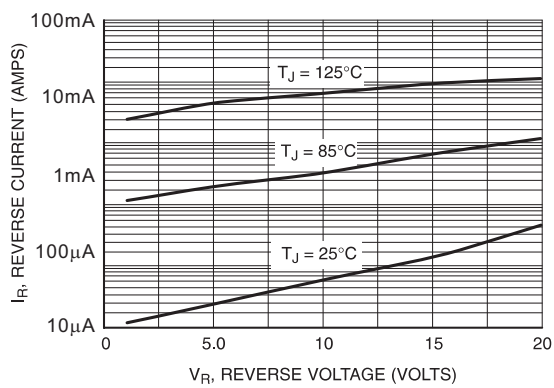
**RATINGS AND CHARACTERISTIC CURVES MBR1020 LL**



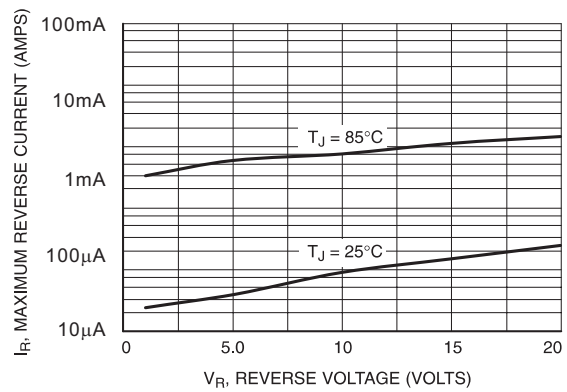
**Figure 1. Typical Forward Voltage**



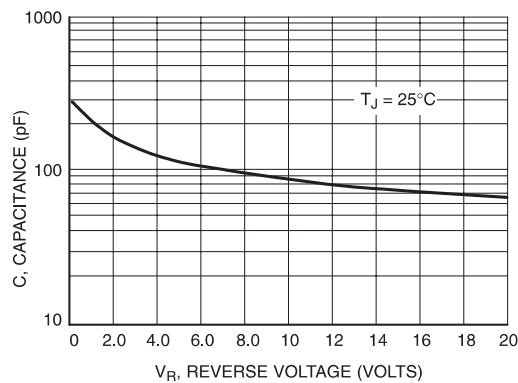
**Figure 2. Maximum Forward Voltage**



**Figure 3. Typical Reverse Current**



**Figure 4. Maximum Reverse Current**



**Figure 5. Capacitance**