

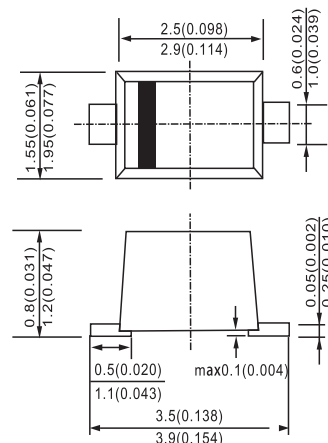
FEATURES

- 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 (See Figure 1)	$I_{F(AV)}$	1.0	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60Hz)	I_{FSM}	45	A
Voltage Rate of Change (Rated V_R)	dv/dt	1000	V/ μ s
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-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) $I_F=0.1$ A $I_F=0.5$ A $I_F=1.0$ A	V_F	0.275 0.315 0.340	0.205 0.270 0.300	V
Maximum Instantaneous Reverse Current (Note3) (Rated DC Voltage)	I_R	0.60	15	mA

1. Pulse Test : Pulse Width = 300 μ s, Duty Cycle < 2%

RATINGS AND CHARACTERISTIC CURVES

MBR1020VL

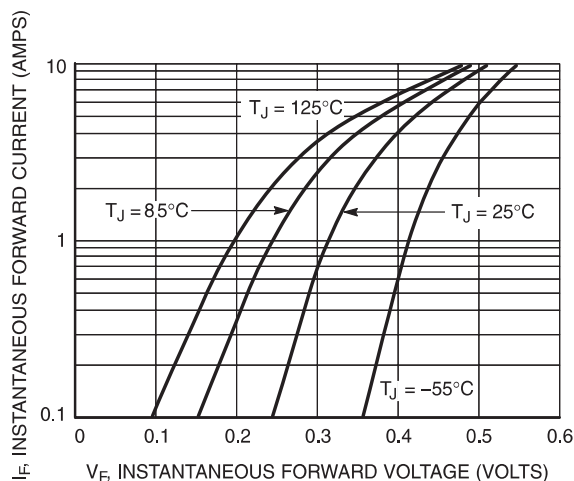


Figure 1. Typical Forward Voltage

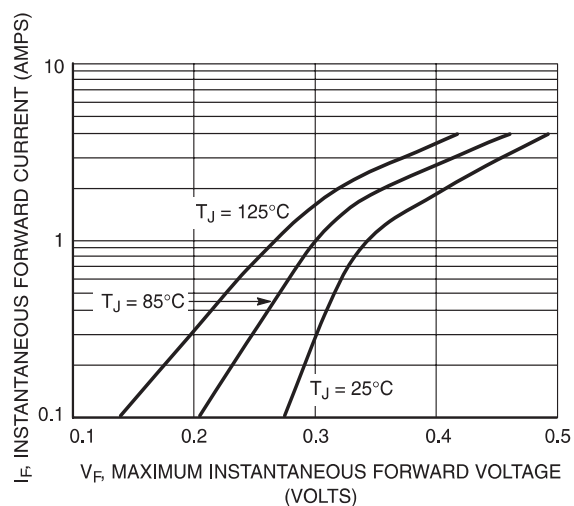


Figure 2. Maximum Forward Voltage

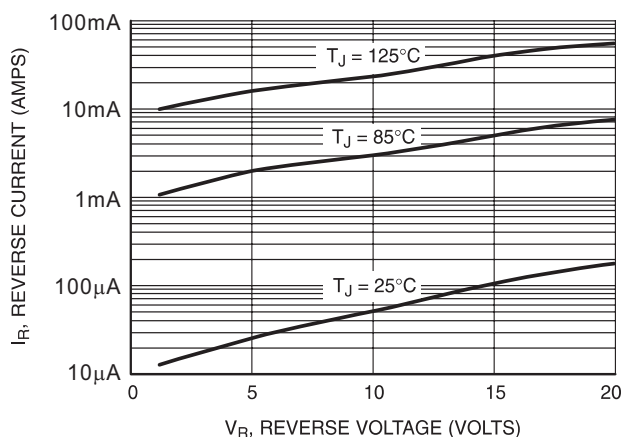


Figure 3. Typical Reverse Current

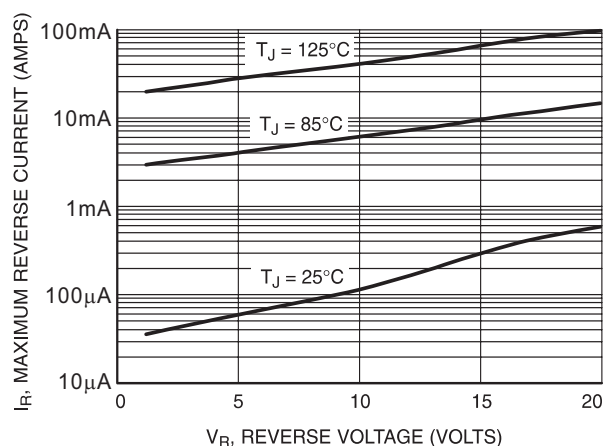


Figure 4. Maximum Reverse Current

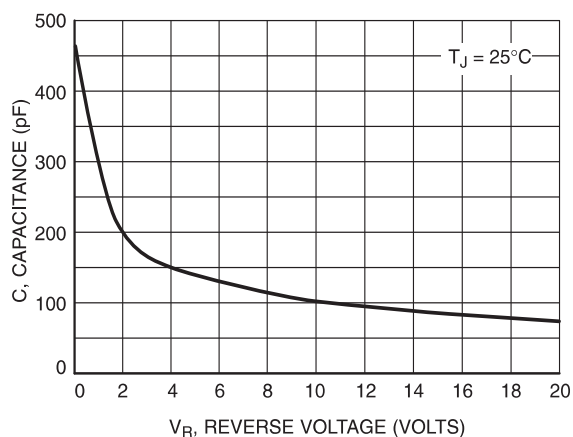


Figure 7. Capacitance