

**REVERSE VOLTAGE: 20 - 100 V**

**CURRENT: 1.0 A**



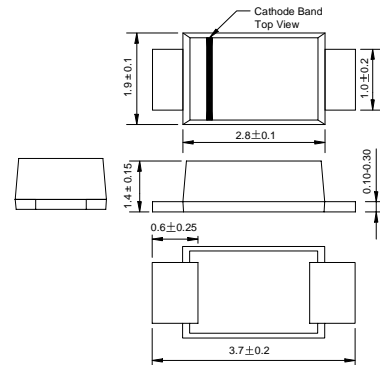
**SOD - 123FL**

## Features

- Low forward surge current
- Ideal for surface mounted applications
- Low leakage current

## Mechanical Data

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Polarity: Color band denotes cathode end
- Weight: 0.0008 ounces, 0.022 gram
- Mounting position: Any



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

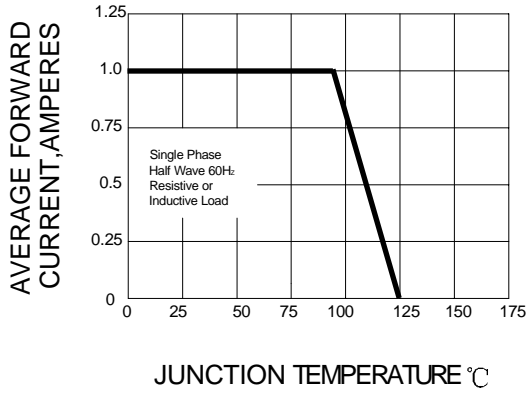
### ELECTRICAL CHARACTERISTICS

		MBRX 120	MBRX 130	MBRX 140	MBRX 160	MBRX 180	MBRX 1A0	UNITS
Device marking code		S2	S3	S4	S6	S8	SA	
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	60	80	100	V
Maximum average forward rectified current $T_j=90$	$I_{(AV)}$	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	20						A
Maximum instantaneous @ $I_{FM}=1.0A$ forward voltage	$V_F$	0.50	0.55	0.72	0.85			V
Repetitive peak reverse current at rated DC blocking voltage	$I_R$	0.3						mA
Typical junction capacitance	$C_J$	30						pF
Operating temperature range	$T_j$	- 55 --- + 125						
Storage temperature range	$T_{STG}$	- 55 --- + 150						

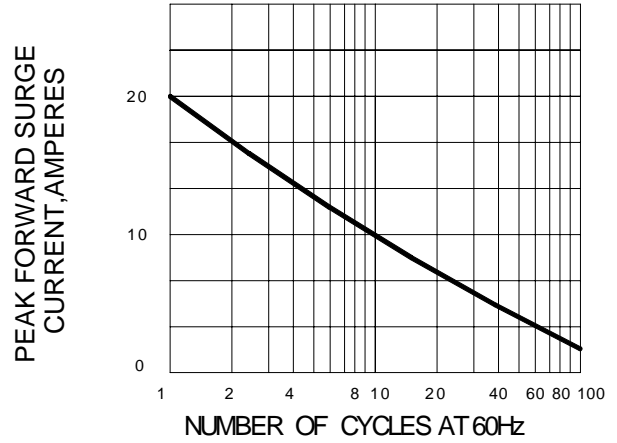
NOTE1. Measured at  $f=1.0MHz, V_R=4.0V$

## Ratings AND Characteristic Curves

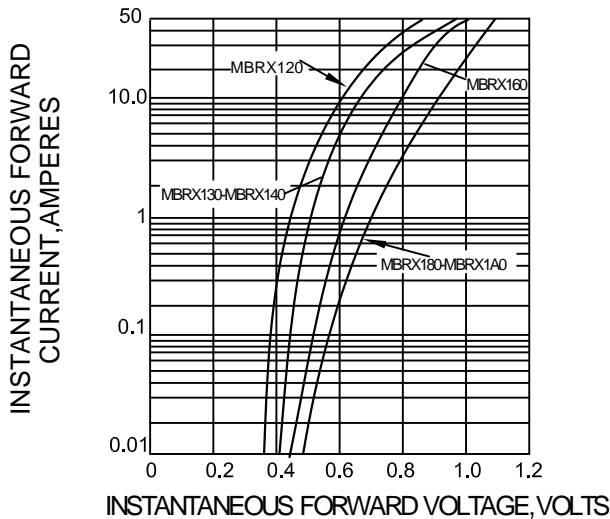
**FIG.1 – FORWARD DERATING CURVE**



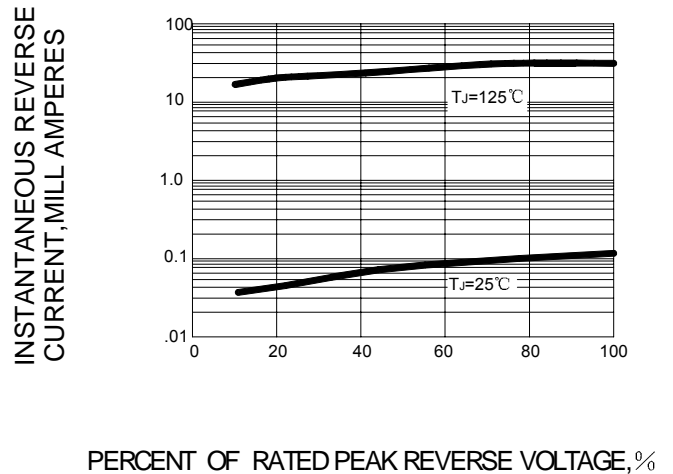
**FIG.2– PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG.5–TYPICAL JUNCTION CAPACITANCE**

