



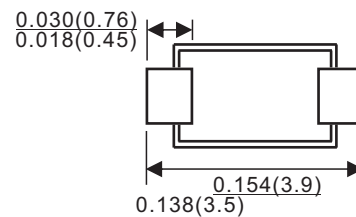
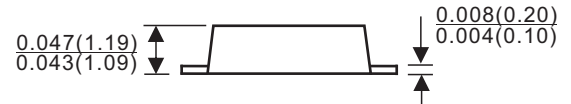
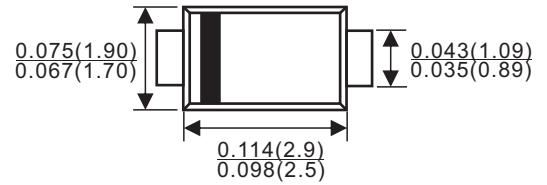
**REVERSE VOLTAGE: 20 - 100 V**  
**CURRENT: 1.0 A**  
**SOD-123FL**

## Features

- ◇ Low forward surge current
- ◇ Ideal for surface mouted 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 inches and(millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

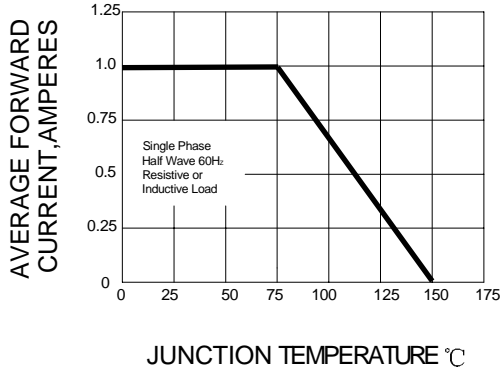
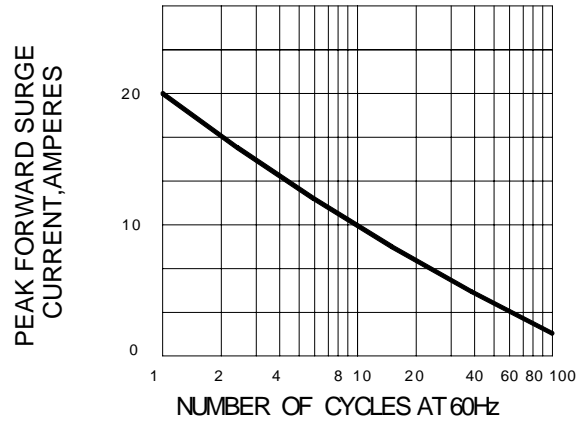
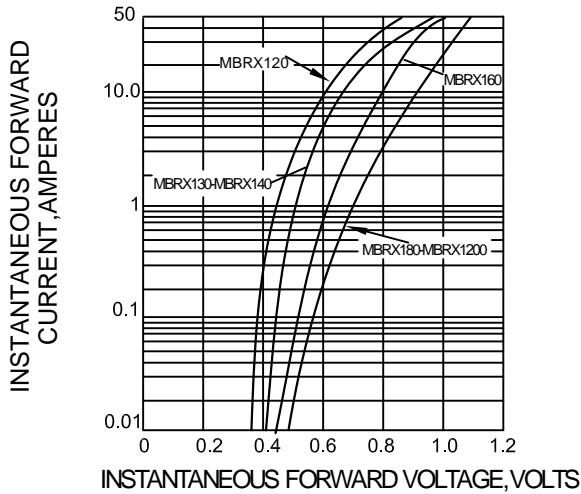
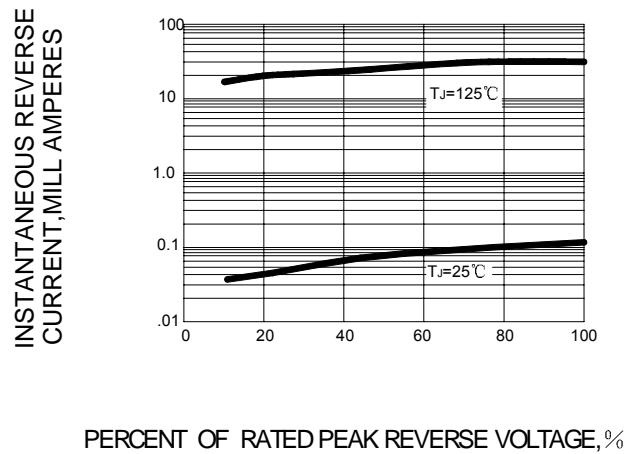
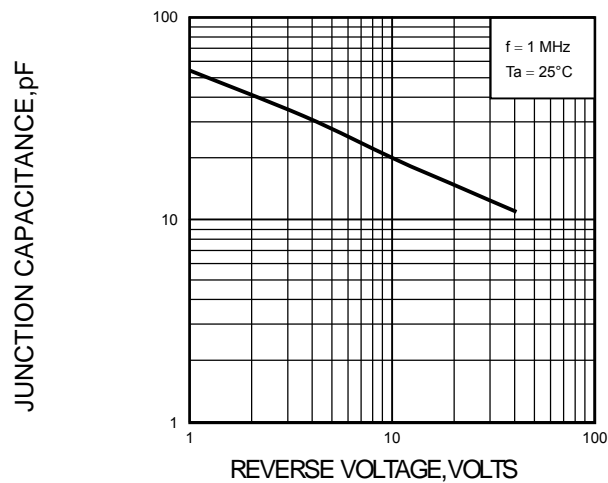
Single hase,half wave,60Hz,resistive or inductive load.For capacive load,derate current by 20%.

### ELECTRICAL CHARACTERISTICS

		MBRX 120	MBRX 130	MBRX 140	MBRX 160	MBRX 180	MBRX 1100	MBRX 1200	UNITS
Device marking code		S2	S3	S4	S6	S8	S11	S12	
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	60	80	100	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	42	56	70	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	60	80	100	200	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	0.95			V
Repetitive peak reverse current at rated DC blocking voltage	$I_R$	0.3							m A
Typical junction capacitance	$C_J$	30							p F
Operating temperature range	$T_j$	- 55 --- + 150							
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**


PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123FL	3000/REEL	90000	40X20X22	5.00	4.00