

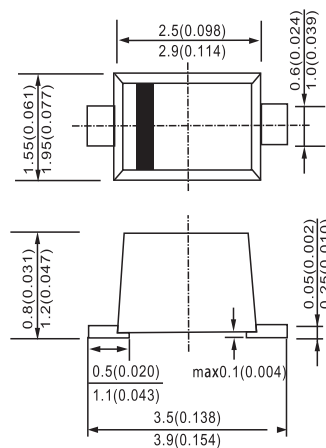
FEATURES

- ◇ Low forward surge current
- ◇ Ideal for surface mouted applications
- ◇ Low leakage current

MECHANICAL DATA

- ◇ Case: JEDEC SOD-123FL, molded plastic over passivated chip
- ◇ Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.0008 ounces, 0.022 gram
- ◇ Mounting position: Any

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		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 $T_j=90^{\circ}\text{C}$	$I_{(AV)}$	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	20						A
Maximum instantaneous forward voltage @ $I_{FM}=1.0\text{A}$	V_F	0.50	0.55	0.72	0.85			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 --- + 125						$^{\circ}\text{C}$
Storage temperature range	T_{STG}	- 55 --- + 150						$^{\circ}\text{C}$

NOTE1. Measured at $f=1.0\text{MHz}$, $V_R=4.0\text{V}$

RATINGS AND CHARACTERISTIC CURVES

MBRX120 THRU MBRX1A0

FIG.1 – FORWARD DERATING CURVE

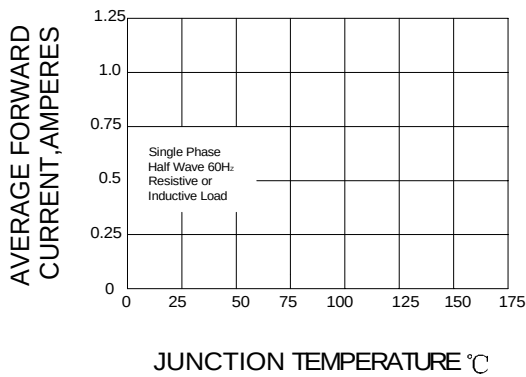


FIG.2– PEAK FORWARD SURGE CURRENT

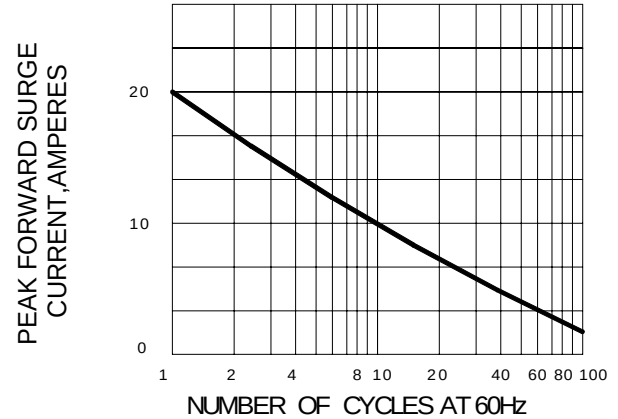


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

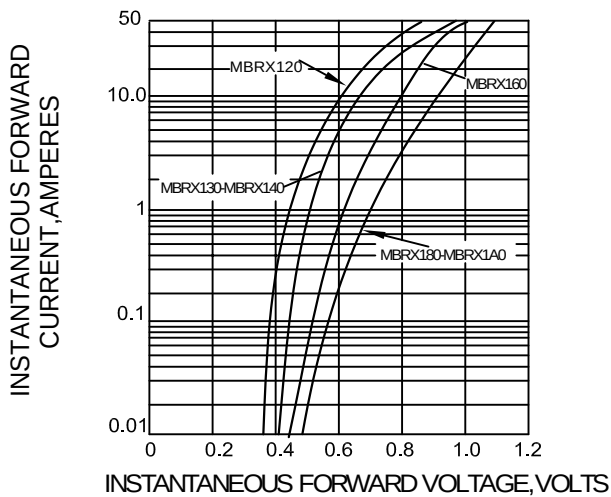


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

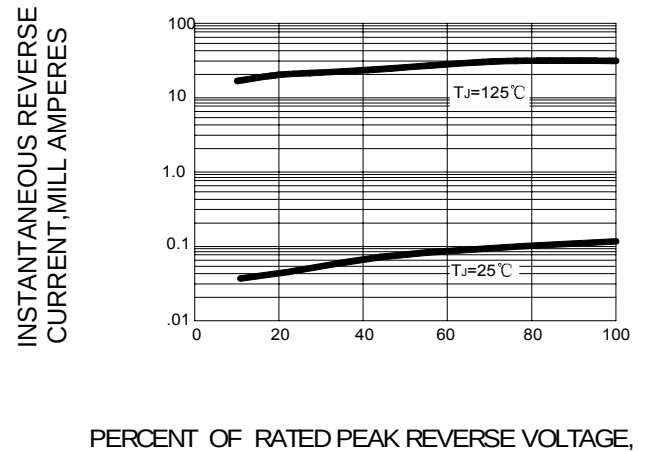


FIG.5–TYPICAL JUNCTION CAPACITANCE

