Lead Free RoHS Compliant

MBRX120L-MBRX1A0L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 - 100 V
CURRENT: 1.0 A

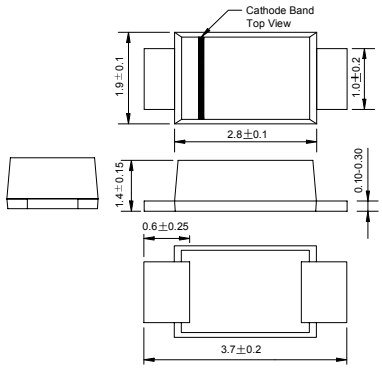
FEATURES

- ◇ 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℃ ambient temperature unless otherwise specified.
Single hase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

ELECTRICAL CHARACTERISTICS

		MBRX 120L	MBRX 130L	MBRX 140L	MBRX 160L	MBRX 180L	MBRX 1A0L	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 forword 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 forward voltage @I_{FM}=1.0A	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 to + 125						℃
Storage temperature range	T_{STG}	- 55 to + 150						℃

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

FIG.1 – FORWARD DERATING CURVE

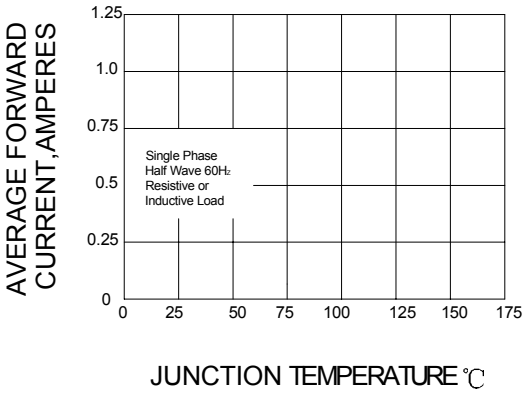


FIG.2– PEAK FORWARD SURGE CURRENT

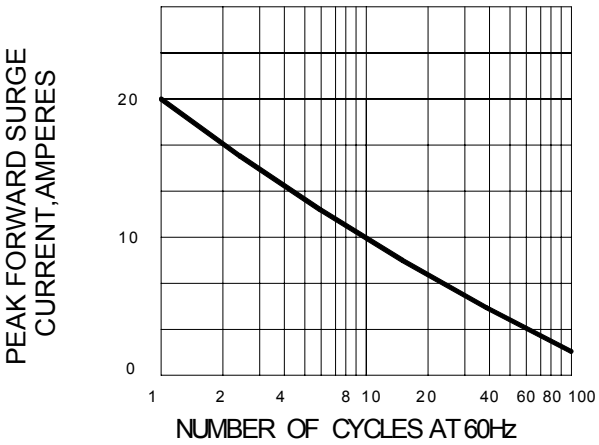


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

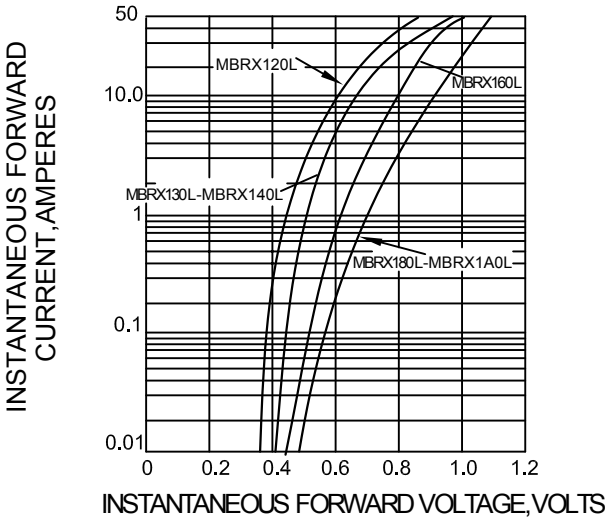


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

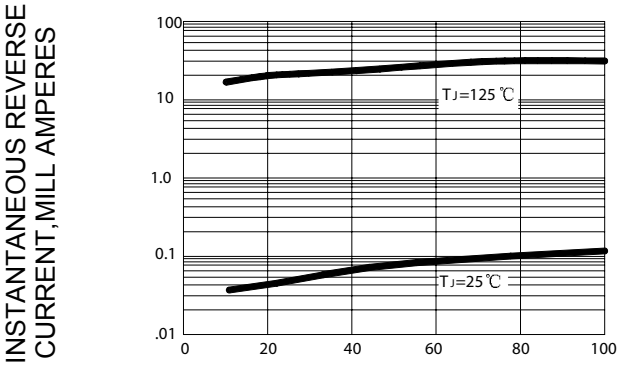


FIG.5–TYPICAL JUNCTION CAPACITANCE