

## MBRX120SL THRU MBRX160SL 1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### 1 Features

- Exceeds environmental standards of MIL-S-19500 / 228
- For surface mounted applications
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy molding compound
- Low leakage current



### 2 Mechanical Data

- Case : Molded plastic, JEDEC DOS-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

### 3 Absolute Maximum Ratings (T<sub>C</sub> = 25°C unless otherwise noted )

Symbol	Parameter	MBRX 120SL	MBRX 130SL	MBRX 140SL	MBRX 150SL	MBRX 160SL	Units
V <sub>RRM</sub>	Maximum recurrent peak reverse voltage	20	30	40	50	60	V
V <sub>RMS</sub>	Maximum rms voltage	14	21	28	35	42	V
V <sub>DC</sub>	Maximum DC blocking voltage	20	30	40	50	60	V
I <sub>O</sub>	Maximum average forward rectified current at TL=90°C	1.0					A
I <sub>FSM</sub>	Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	30					A
C <sub>J</sub>	Typical junction capacitance (note 1)	120					pF
T <sub>STG</sub>	Storage temperature range	-55 to +150					°C
T <sub>OP</sub>	Operating temperature range	-55 to +125					°C

\* note :

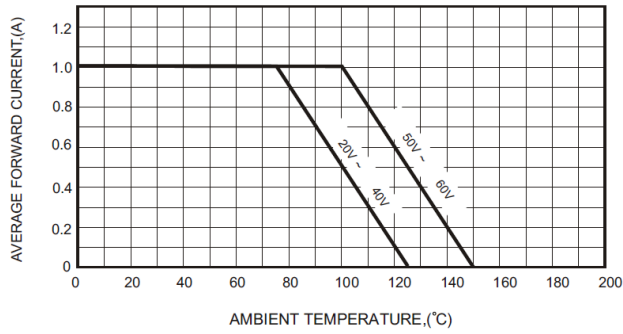
- ① Measured at 1.0MHz and applied reverse of 4.0V D.C.

### 4 Electrical Characteristics (T<sub>C</sub> = 25°C unless otherwise noted)

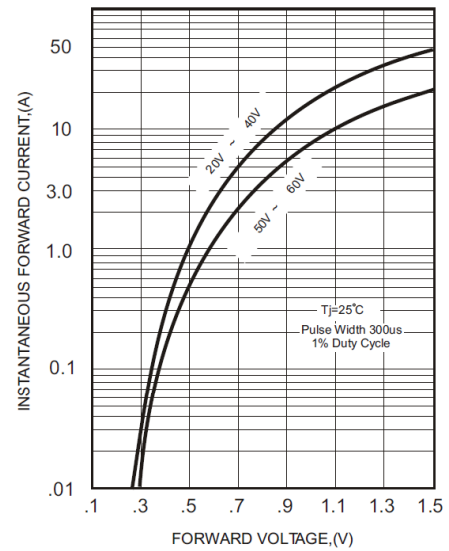
Symbol	Parameter	MBRX 120SL	MBRX 130SL	MBRX 140SL	MBRX 150SL	MBRX 160SL	Units
V <sub>F</sub>	Maximum forward voltage at I <sub>O</sub> DC	0.55			0.70		V
I <sub>R</sub>	Maximum reverse current at 25°C	0.5					mA

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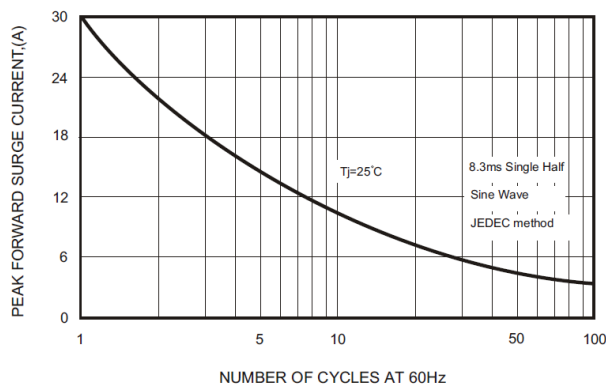
TYPICAL FORWARD CURRENT DERATING CURVE



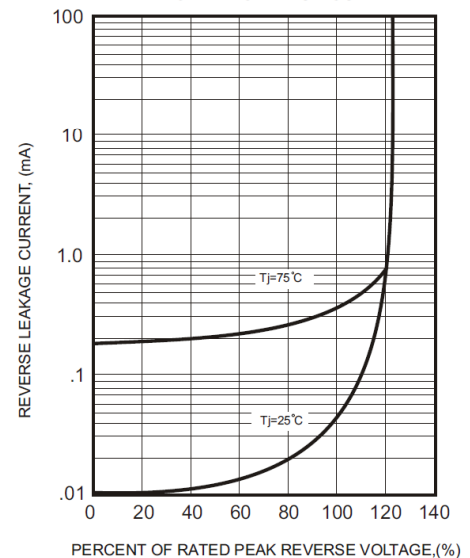
TYPICAL FORWARD CHARACTERISTICS



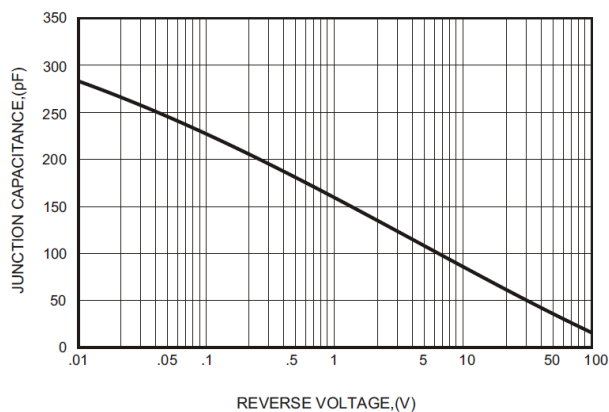
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



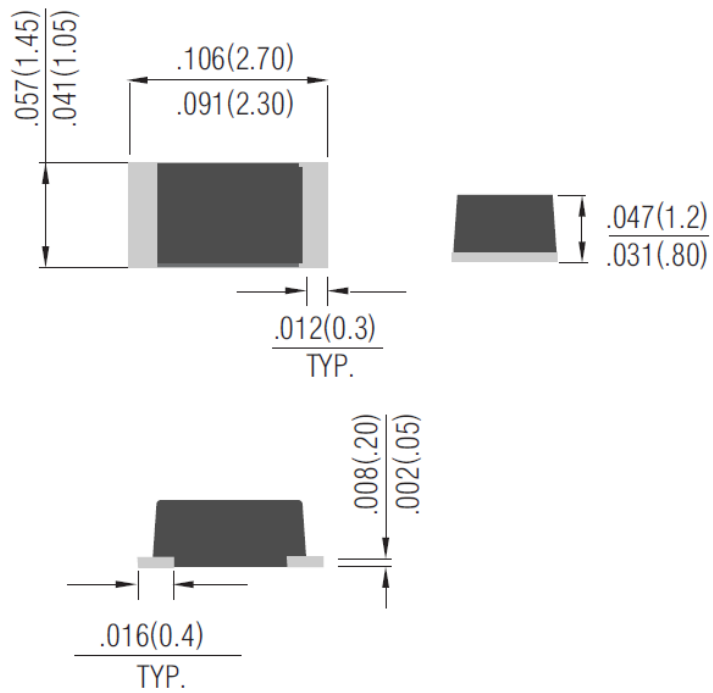
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### 5 Package Dimensions

SOD-323





## DEVICE SPECIFICATION

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#### Note

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