



SCHOTTKY BARRIER RECTIFIERS

FEATURES

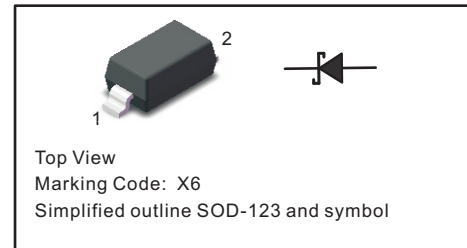
- For Surface Mount Application
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:16mg/0.00056oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	MBRX160	Units
Maximum recurrent peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Continuous forward current	I_F	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.3	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage	V_F	0.72 @ $I_F=1.0A$	V
Total capacitance	C_{tot}	30	pF
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C



Fig.1 Forward Current Derating Curve

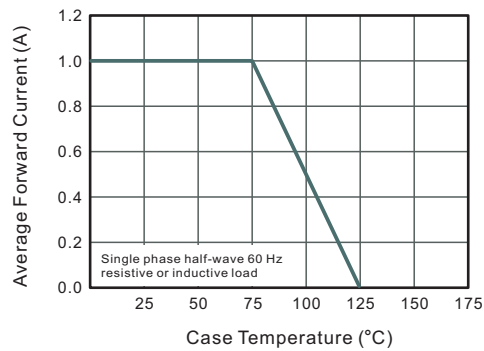


Fig.2 Typical Reverse Characteristics

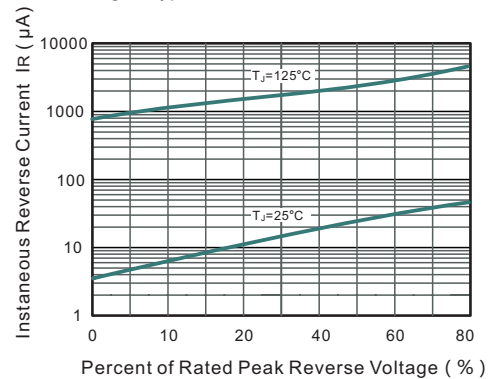


Fig.3 TYPICAL FORWARD VOLTAGE

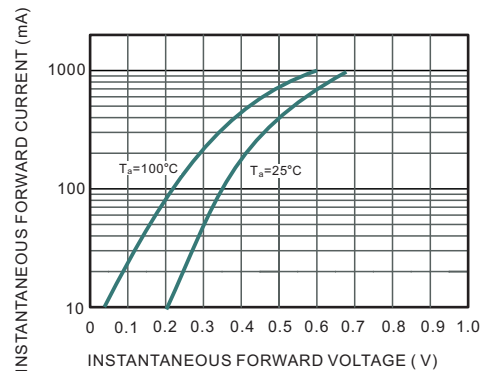


Fig.4 Typical Junction Capacitance

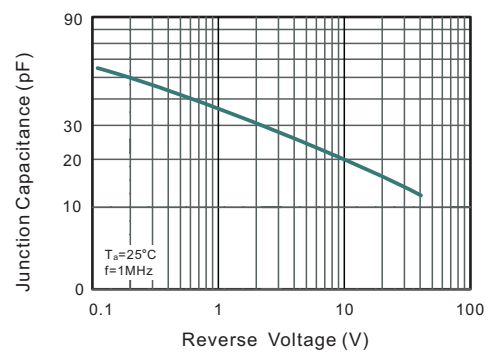
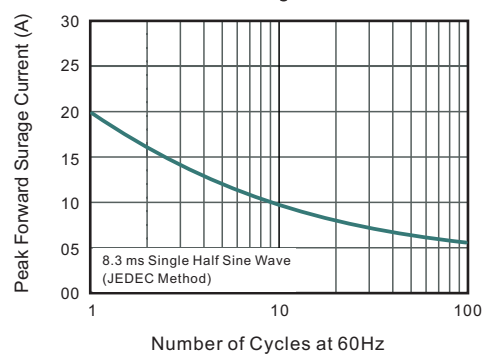


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

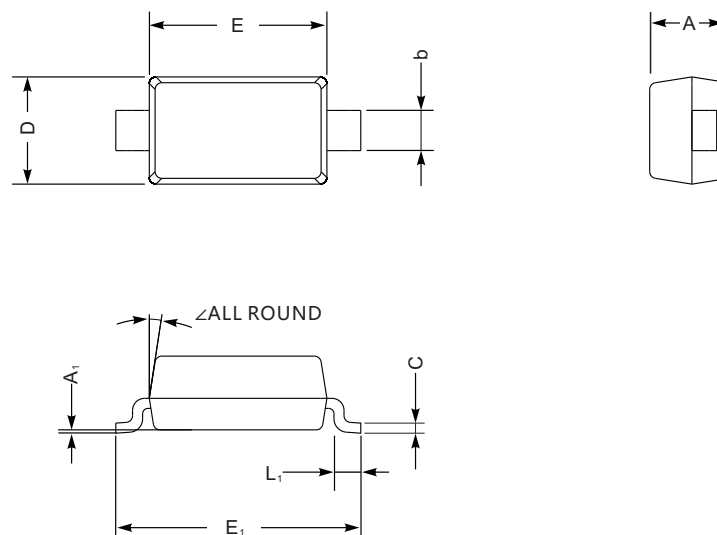




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

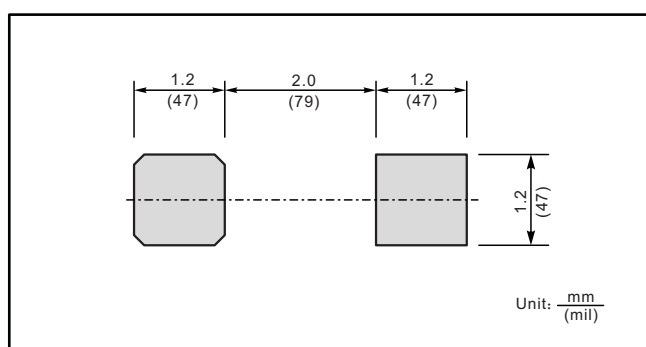
SOD-123



SOD-123 mechanical data

UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



Marking

Type number	Marking code
MBRX160	X6