



Features

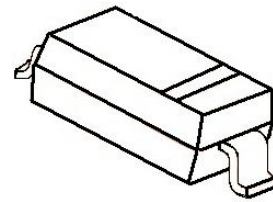
- High Current Capability
- Low Forward Voltage Drop
- Low IR

Applications

- Plastic-Encapsulate Schottky Barrier Diode

Mechanical Data

- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode
- Lead Epoxy UL: 94V-0
- Mounting Position: Any
- Marking :X6



SOD-123

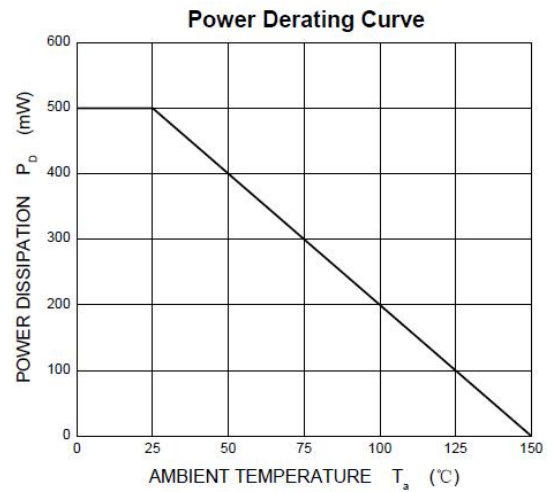
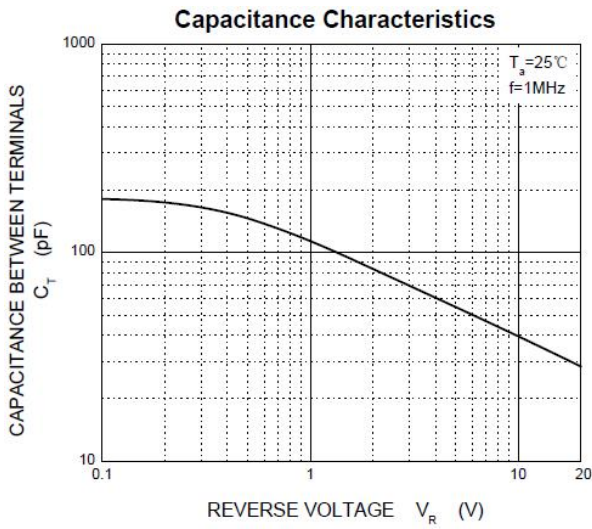
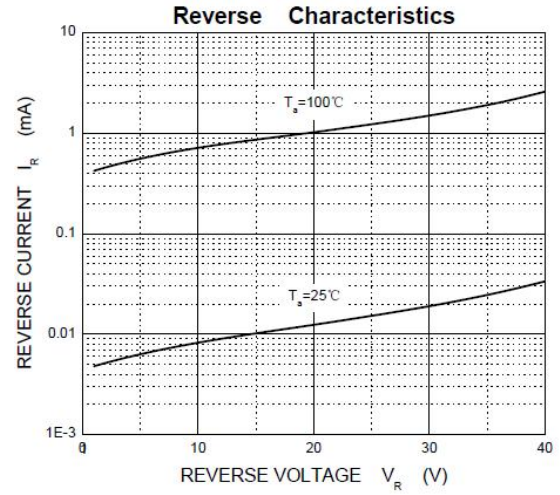
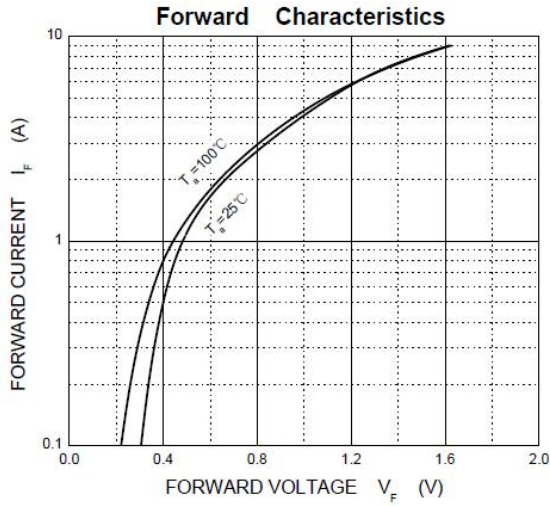
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise)

Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	VRRM	60	V
Maximum RMS voltage	VRMS	42	V
Maximum DC blocking voltage	VDC	60	V
Maximum average forward rectified current	IFM	1.0	A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	5.5	A
Typical thermal resistance	R θ JA	250	°C/W
Storage temperature range	TSTG	-40-+150	°C

Parameters	Symbol	Test conditions	Value	Unit
Maximum forward voltage	VF	IF = 0.5A IF=1A	0.53 0.66	V
Maximum reverse breakdown voltage	VR	IR=1mA	60	V
Maximum reverse current	IR	VR=60V	50	uA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	150	pF



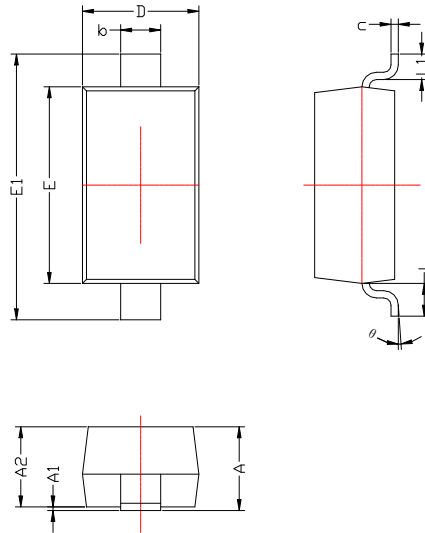
Characteristic Curves





SOD-123 PACKAGE OUTLINE

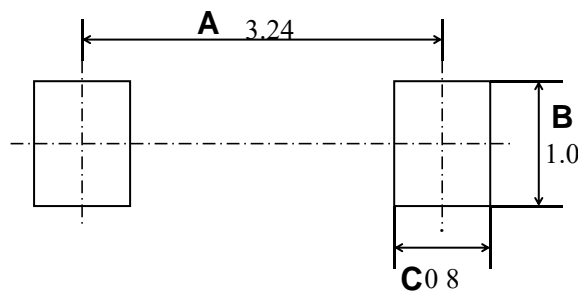
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

Precautions: PCB Design

Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs



MBRX160			
Dimension	Min.	Typ.	Max.
A	3.19	3.24	3.29
B	0.95	1.0	1.05
C	0.75	0.8	0.85

PACKAGE INFORMATION

Device	Package	Shipping
MBRX160	SOD-123	3000/Tape&Reel