



Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection



SOD-123



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRX160	SOD-123	SM	3000

Maxmim Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	60	V
I_O	Forward Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	20	
P_D	Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	225	°C/W
T_j	Junction Temperature	125	°C
T_{stg}	Storage Temperature	-55~+150	°C

Electrcal Charcteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R=20V$			100	μA
		$V_R=60V$			300	μA
Forward voltage	$V_{F(1)}$	$I_F=500mA$			0.60	V
	$V_{F(2)}^*$	$I_F=1000mA$			0.72	

* Pulse test



Typical Characteristics

Fig.1 Forward Current Derating Curve

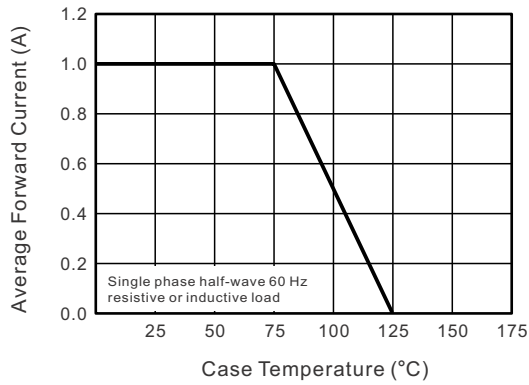


Fig.2 Typical Reverse Characteristics

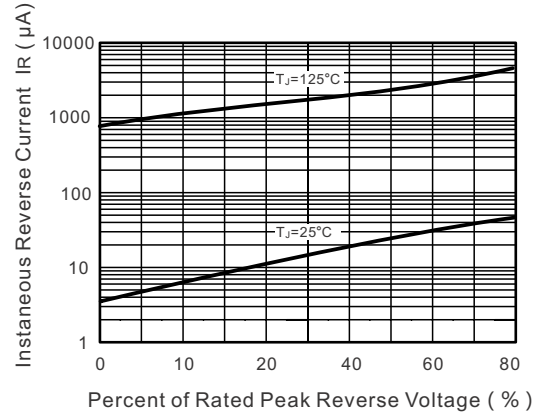


Fig.3 TYPICAL FORWARD VOLTAGE

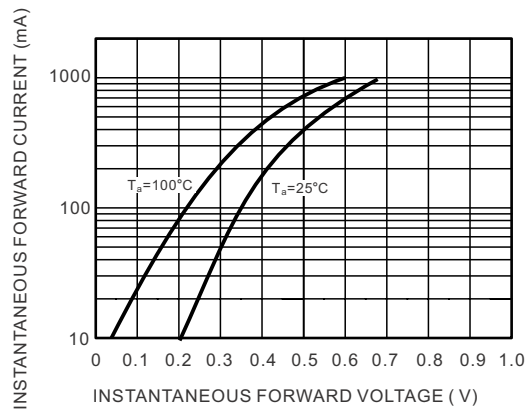


Fig.4 Typical Junction Capacitance

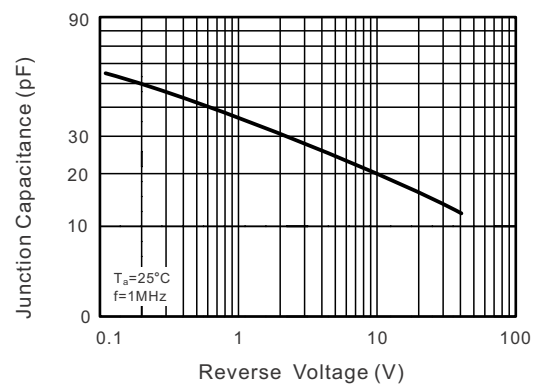
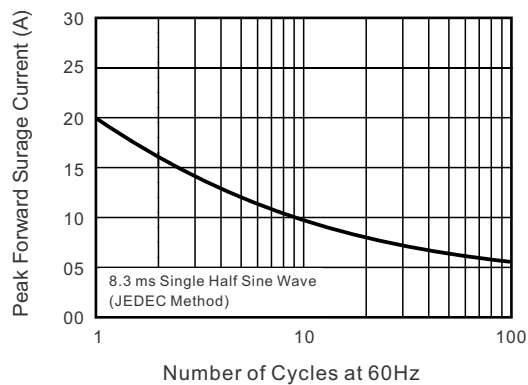


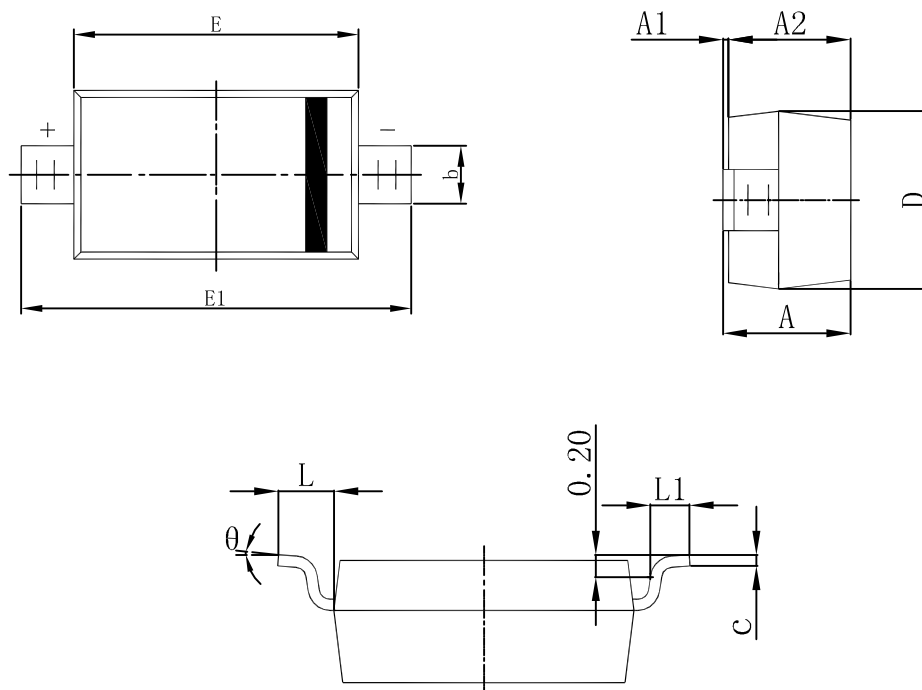
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





Package Outline Dimensions

SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



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