



Features

- Average Rectified Output Current: $I_O=400\text{mA}$
- Power Dissipation of 200mw

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBR0520WS	SOD-323	B2	3000
MBR0530WS	SOD-323	B3	3000
MBR0540WS	SOD-323	B4	3000



SOD-323



Maximum Ratings (Ta=25 unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	40	V
Average Forward Rectified Current	$I_{F(AV)}$	400	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$	I_{FSM}	2	A
Power Dissipation	P_{tot}	200	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 125	°C

Electrical Characteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	-	V
Reverse Leakage Current at V_R at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$	I_R	-	-	5 5 5	μA
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	-	-	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\ \Omega$	t_{rr}	-	10	-	ns



Typical Characteristics

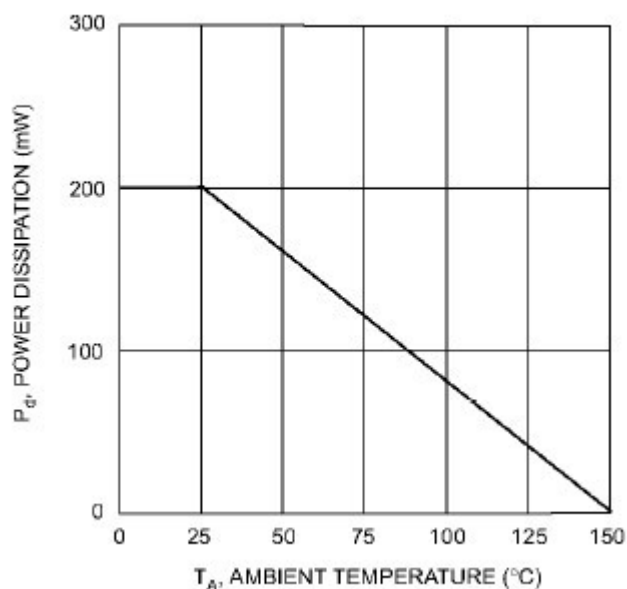


Fig. 1 Power Derating Curve

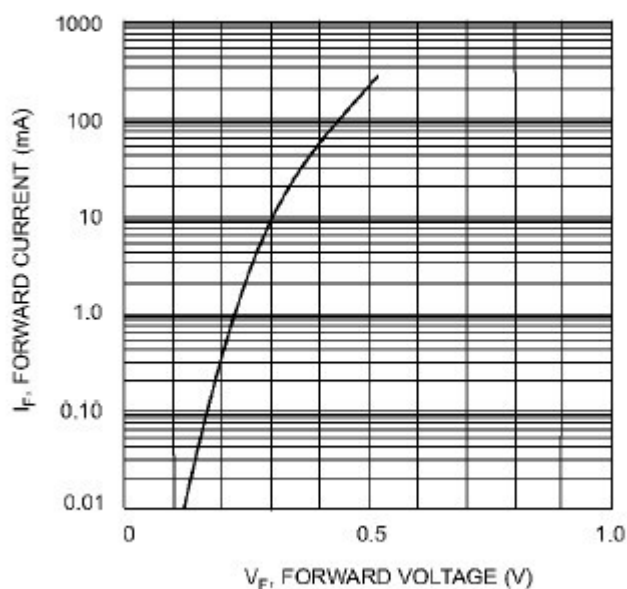


Fig. 2 Typical Forward Characteristics

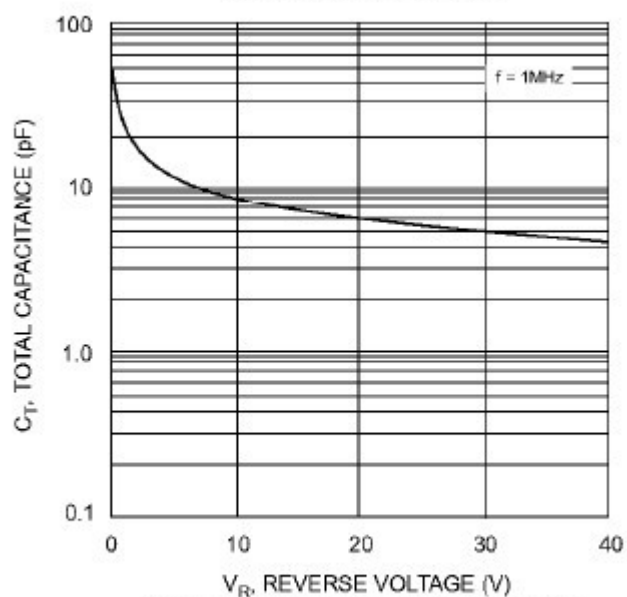
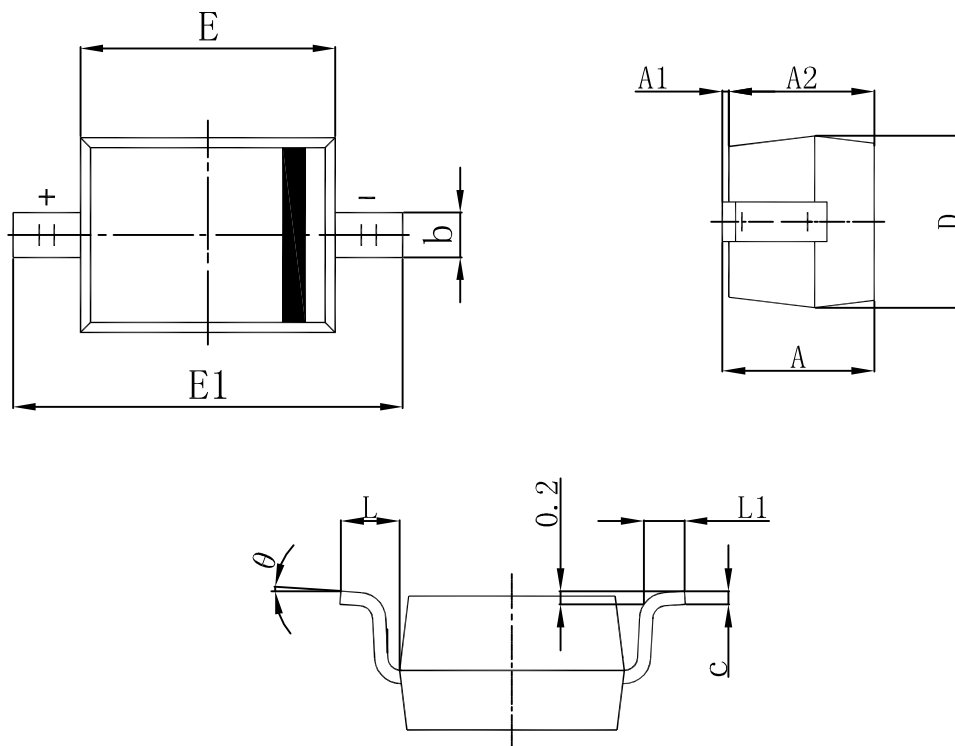


Fig. 3 Total Capacitance vs Reverse Voltage



Package Outline Dimensions

SOD-323



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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