



FEATURES

- Average Rectified Output Current: $I_O=500\text{mA}$
- Power Dissipation of 410mw

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBR0520T1G	SOD-123	R2	3000
MBR0530T1G	SOD-123	R3	3000
MBR0540T1G	SOD-123	R4	3000
MBR0560T1G	SOD-123	R6	3000
MBR0580T1G	SOD-123	R8	3000



Maxmim Ratings (Ta=25 unless otherwise noted)

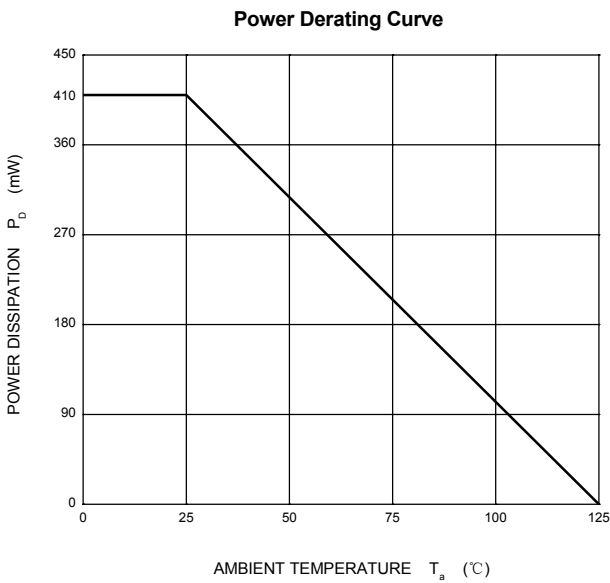
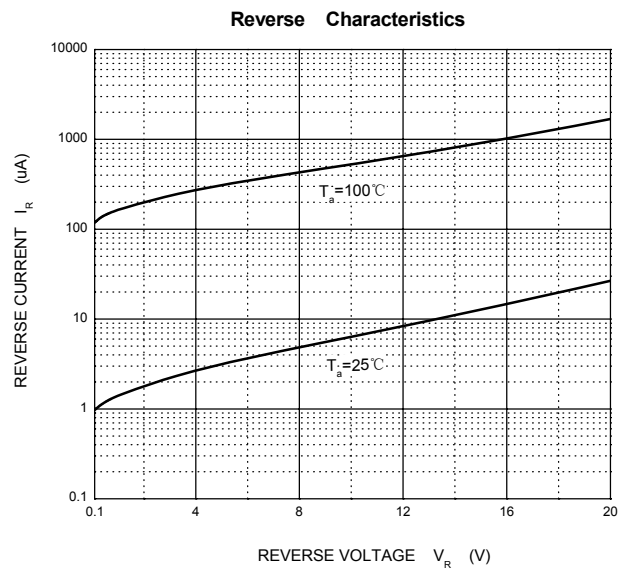
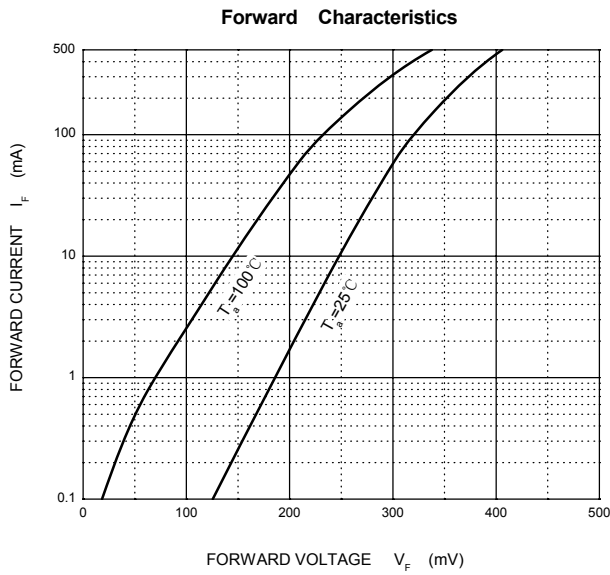
Parameter	Symbol	0520 T1G	0530 T1G	0540 T1G	0560 T1G	0580 T1G	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	60	80	V
Maximum RMS voltage	V_{RMS}	14	21	28	42	56	
Mean rectifying current	I_O	0.5					A
Non-repetitive Peak forward surge current @t=8.3ms	I_{FSM}	5.5					A
Power Dissipation	P_d	410					mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	244					$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_j	-40 ~ +125					$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150					$^{\circ}\text{C}$

Electrcal Charcteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			0.45	V	$I_F=500\text{mA}$
MBR0520T1G				0.55		
MBR0530T1G				0.55		
MBR0540T1G				0.70		
MBR0560T1G				0.80		
Reverse current	I_R			80	μA	$V_R=20\text{V}$
MBR0520T1G						$V_R=30\text{V}$
MBR0530T1G						$V_R=40\text{V}$
MBR0540T1G						$V_R=60\text{V}$
MBR0560T1G						$V_R=80\text{V}$
Capacitance between terminals	C_T		30		pF	$V_R=4\text{V}, f=1\text{MHZ}$

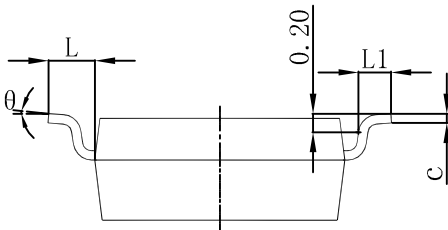
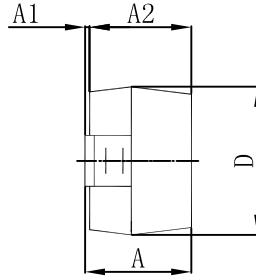
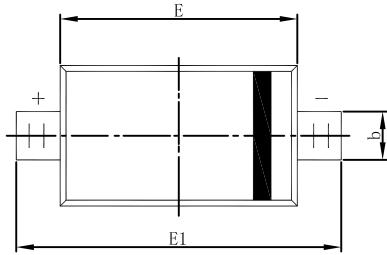


Typical Characteristics

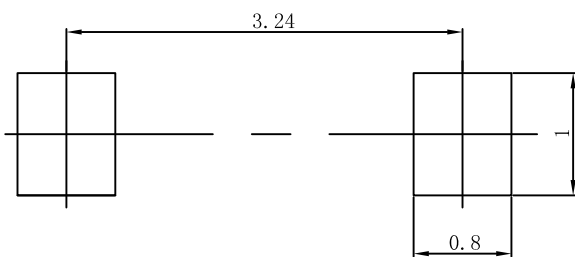




SOD-123 Package Outline Dimensions



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°



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.



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