

FEATURES

- Average Rectified Output Current:I_O=500mA
- 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)

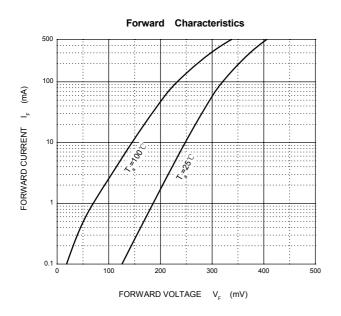
Parameter	Symbol	0520 T1G	0530 T1G	0540 T1G	0560 T1G	0580 T1G	Unit
Maximum recurrent peak reverse voltage Maximum RMS voltage	V_{RRM} V_{RMS}	20 14	30 21	40 28	60 42	80 56	V
Mean rectifying current	Io	0.5			Α		
Non-repetitive Peak forward surge current @t=8.3ms	I _{FSM}	5.5			Α		
Power Dissipation	Pd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

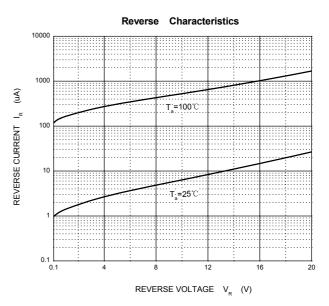
Electrical Charcteristics (Ta=25 unless otherwise specified)

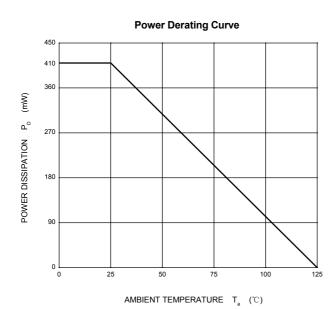
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Forward voltage							
MBR0520T1G				0.45			
MBR0530T1G	V_{F}			0.55	V	I _F =500mA	
MBR0540T1G	VF			0.55	V	IF-300IIIA	
MBR0560T1G				0.70			
MBR0580T1G				0.80			
Reverse current							
MBR0520T1G	I _R					V _R =20V	
MBR0530T1G						V _R =30V	
MBR0540T1G				80	μA	V _R =40V	
MBR0560T1G						V _R =60V	
MBR0580T1G						V _R =80V	
Capacitance between terminals	C_{T}		30		рF	V _R =4V, f=1MHZ	



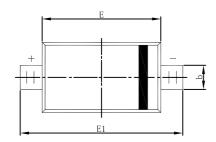
Typical Characteristics

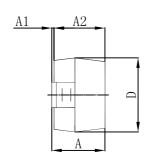


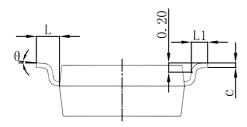




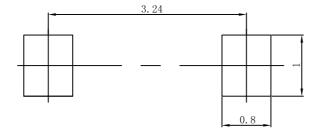
SOD-123 Package Outline Dimensions







Symbol	Dimensions	In Millimeters	Dimensions In Inches			
	Min	Max	Min	Max		
Α	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		
С	0.080	0.150	0.003	0.006		
D	1.500	1.700	0.059	0.067		
Е	2.600	2.800	0.102	0.110		
E1	3.550	3.850	0.140	0.152		
Ĺ	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:± 0.05mm.
- 3. The pad layout is for reference purposes only.

MBR0520T1G~MBR0580T1G SCHOTTKY BARRIER DIODE

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