

#### Features

- Average Rectified Output Current:I<sub>0</sub>=500mA
- Power Dissipation of 410mw

### Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBR0520	SOD-123	R2	3000
MBR0530	SOD-123	R3	3000
MBR0540	SOD-123	R4	3000
MBR0560	SOD-123	R6	3000
MBR0580	SOD-123	R8	3000



SOD-123

#### Maxmim Ratings (Ta=25°C unless otherwise noted)

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

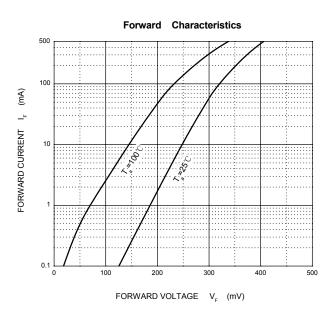
# Electrcal Charcteristics (Ta=25°C unless otherwise specified)

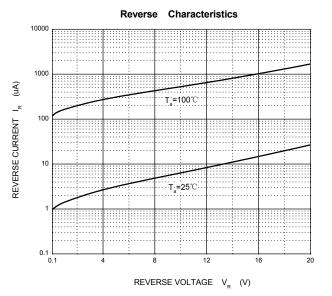
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage						
MBR0520				0.45		
MBR0530	V <sub>F</sub>			0.55	Ň	L
MBR0540				0.55	V	I <sub>F</sub> =500mA
MBR0560				0.70		
MBR0580				0.80		
Reverse current						
MBR0520						V <sub>R</sub> =20V
MBR0530						V <sub>R</sub> =30V
MBR0540	I <sub>R</sub>			80	μA	V <sub>R</sub> =40V
MBR0560						V <sub>R</sub> =60V
MBR0580						V <sub>R</sub> =80V
Capacitance between terminals	CT		30		pF	V <sub>R</sub> =4V, f=1MHZ

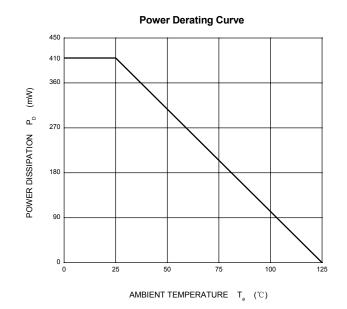


# MBR0520~MBR0580 SCHOTTKY BARRIER DIODE

# **Typical Characteristics**



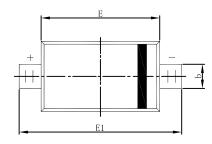


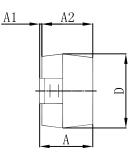


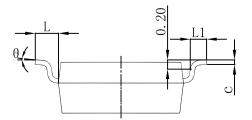


# MBR0520~MBR0580 SCHOTTKY BARRIER DIODE

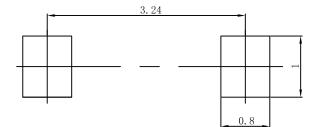
### **SOD-123 Package Outline Dimensions**







Symbol	Dimensions	In Millimeters	Dimensions In Inches			
	Min	Max	Min	Max		
А	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		
ш	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:± 0.05mm.

3. The pad layout is for reference purposes only.



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