



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

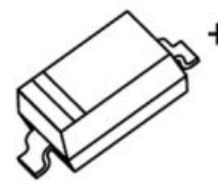
MBR0520-MBR0580

SOD-123 Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

SOD-123

■ Features 特点

Low forward voltage drop 低正向压降
 High current capability 高电流能力
 Surface mount device 表面贴装器件
 Case 封装:SOD-123



■ Maximum Rating 最大额定值

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

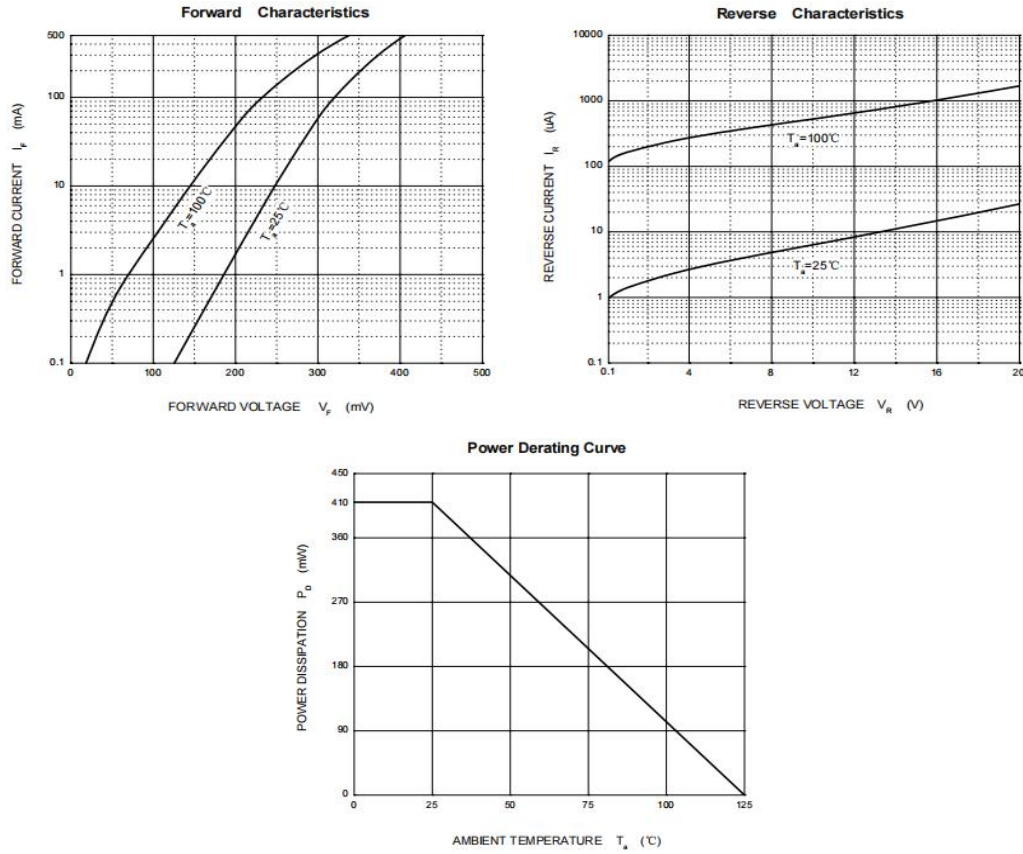
Characteristic 特性参数	Symbol 符号	MBR0520	MBR0530	MBR0540	MBR0560	MBR0580	Unit 单位
Device Marking 产品印字		R2	R3	R4	R6	R8	V
Peak Reverse Voltage 反向峰值电压	V_{RRM}	20	30	40	60	80	V
DC Reverse Voltage 直流反向电压	V_R	20	30	40	60	80	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	14	21	28	42	56	V
Forward Rectified Current 正向整流电流	I_F	0.5					A
Peak Surge Current 峰值浪涌电流	I_{FSM}	5.5					A
Power Dissipation 耗散功率	P_D	410					mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	245					$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-50\text{to}+125^{\circ}\text{C}$					$^{\circ}\text{C}$

■ Electrical Characteristics 电特性

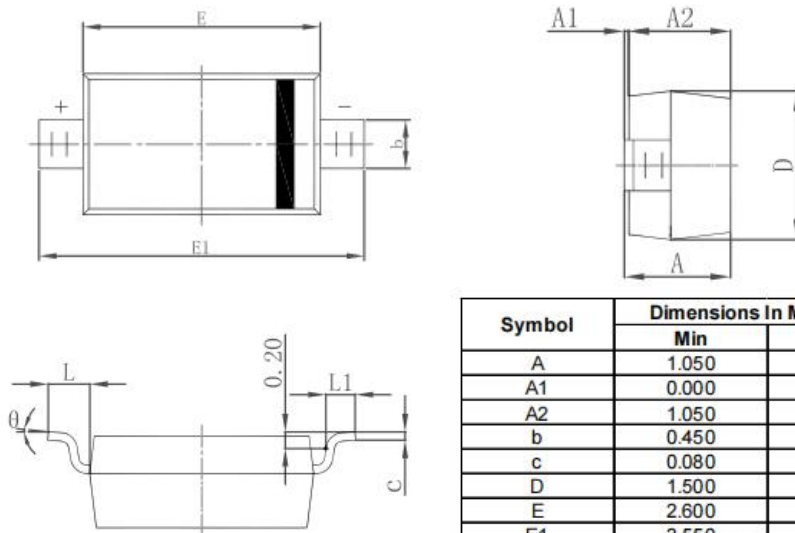
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	MBR0520	MBR0530	MBR0540	MBR0560	MBR0580	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	20	30	40	60	80	V	$I_R=1\text{mA}$
Forward Voltage 正向电压	V_F	0.45	0.55	0.55	0.7	0.8	V	$I_F=0.5\text{A}$
Reverse Current 反向电流	I_R	80					μA	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	C_T	30					pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线



■ Dimension 外形封装尺寸 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 $^\circ$	8 $^\circ$	0 $^\circ$	8 $^\circ$