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

■Features 特点



High current capability 高电流能力
Low forward voltage drop 低正向压降
Guard Ring Construction for Transient Protection 瞬态保护环结构
Case 封装:SOD-123

■Maximum Rating 最大额定值

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

Characteristic 特性参数	Symbol 符号	B0520LW	B0530W	B0540W	Unit 单位
Device Marking 产品印字		SD	SE	SF	
Peak Reverse Voltage 反向峰值电压	V_{RRM}	20	30	40	V
Peak Reverse Working Voltage 反向峰值工作电压	V_{RWM}	20	30	40	V
DC Reverse Voltage 直流反向电压	V_R	20	30	40	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	14	21	28	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	500			mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	250			℃/W
Junction/Storage Temperature 结温/储藏温度	T_J,T_{stg}	-50to+150			℃

■Electrical Characteristics 电特性

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

Characteristic 特性参数	Symbol 符号	B0520LW	B0530W	B0540W	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	20	30	40	V	I_R=250μA I_R=200μA I_R=20μA
Forward Voltage 正向电压	V_F	0.32 0.385	0.375 0.43	0.51 0.62	V	I_F=0.1A I_F=0.5A I_F=1A
Reverse Current 反向电流	I_R	75 250	20 130	10 20	μA	V_R=10V V_R=15V V_R=20V V_R=30V V_R=40V
Diode Capacitance 二极管电容	C_T	170			pF	V_R=4V,f=1MHz

■Typical Characteristic Curve 典型特性曲线

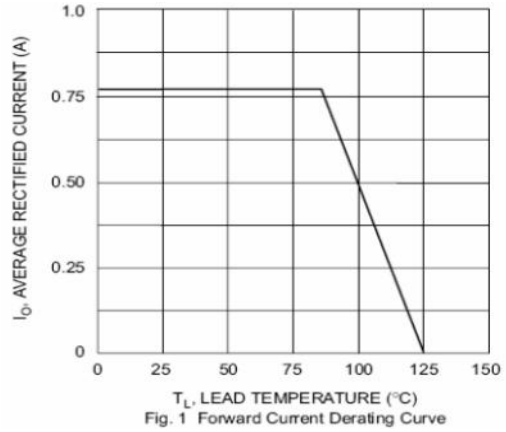

Fig. 1 Forward Current Derating Curve

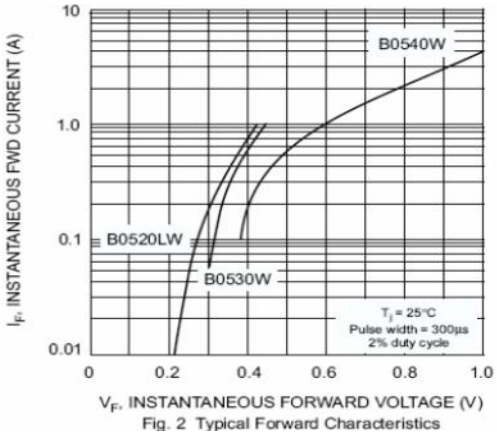

Fig. 2 Typical Forward Characteristics

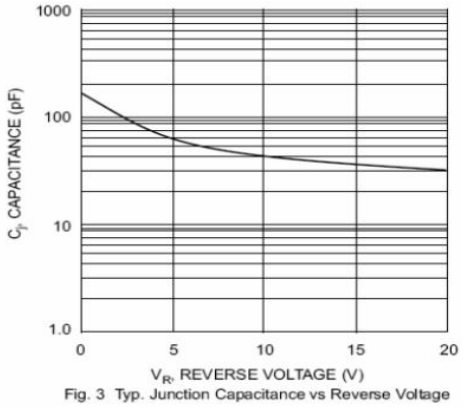

Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

■ Dimension 外形封装尺寸 SOD-123

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.600	2.800	0.102	0.110
B	1.500	1.700	0.059	0.067
C	1.050	1.150	0.041	0.045
C1	0.600	0.700	0.024	0.028
D	3.550	3.850	0.140	0.152
L	0.250	0.450	0.010	0.018
b	0.450	0.650	0.018	0.026
h	0.020	0.120	0.001	0.005
Θ3	0°	7°	0°	7°

