



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

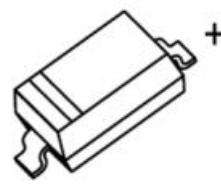
B5817W-B5819W

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	B5817W	B5818W	B5819W	Unit 单位
Device Marking 产品印字		SJ	SK	SL	
Peak Reverse Voltage 反向峰值电压	V_{RRM}	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	1			A
Peak Surge Current 峰值浪涌电流	I_{FSM}	25			A
Repetitive Peak Surge Current 重复峰值浪涌电流	I_{FRM}	3			A
Power Dissipation 耗散功率	P_D	250			mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	400			$^{\circ}\text{C}/\text{W}$
Junction Temperature 结温	T_J	-65to+125			$^{\circ}\text{C}$
Storage Temperature 储藏温度	T_{stg}	-65to+150			$^{\circ}\text{C}$

■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	B5817W	B5818W	B5819W	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	20	30	40	V	$I_R=1\text{mA}$
Forward Voltage 正向电压	V_F	0.45 0.75	0.5 0.875	0.55 0.9	V	$I_F=1\text{A}$ $I_F=3\text{A}$
Reverse Current 反向电流	I_R	0.05 ($T_A=25^{\circ}\text{C}$) 8 ($T_A=100^{\circ}\text{C}$)			mA	$V_R=V_{RRM}$
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

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

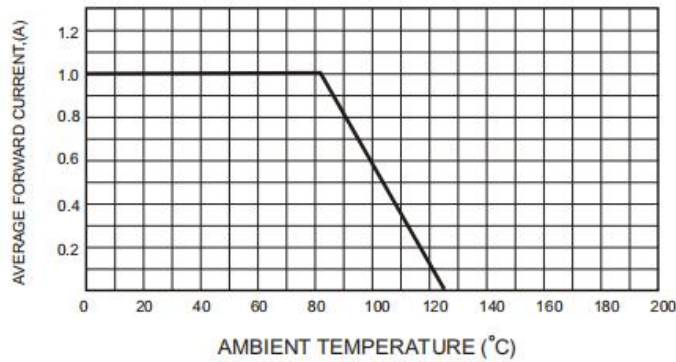


FIG.3 - Power Derating Curve

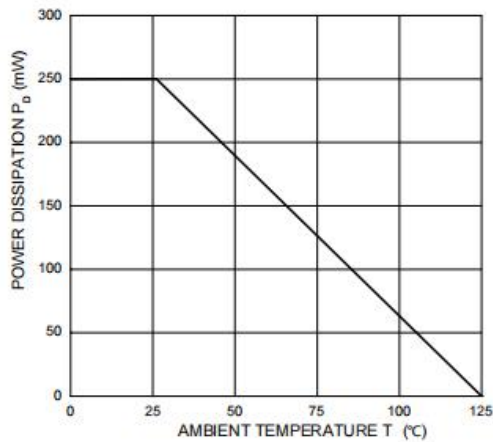


FIG.4-TYPICAL JUNCTION CAPACITANCE

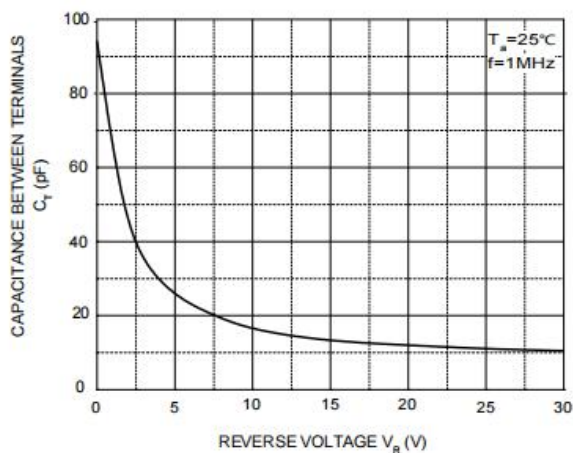


FIG.2-TYPICAL FORWARD CHARACTERISTICS

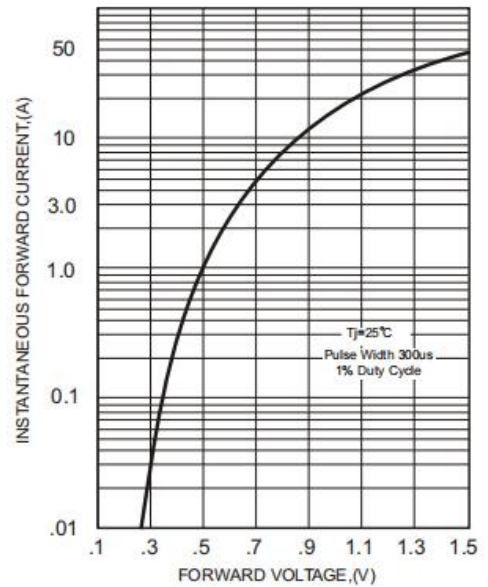
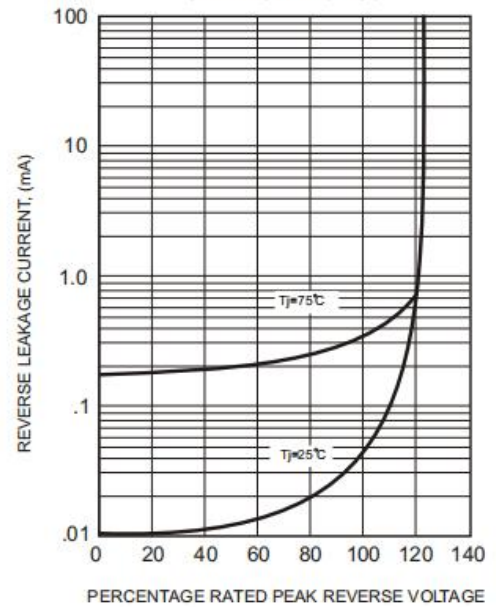


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

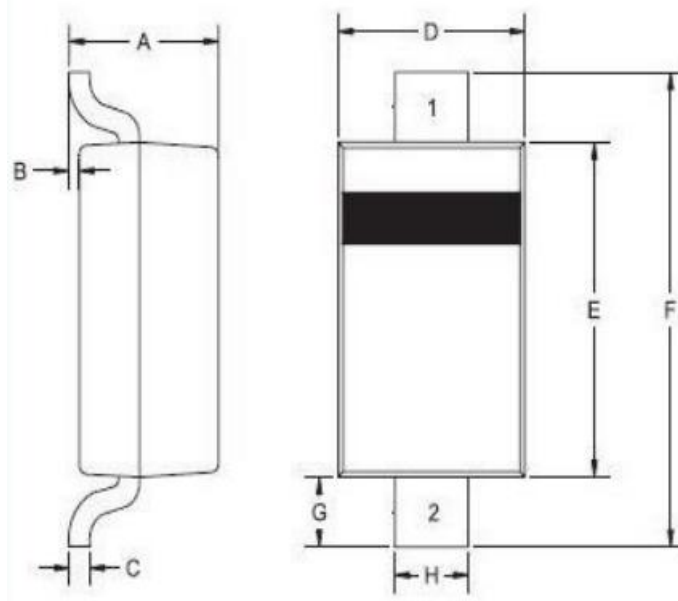


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B5817W-B5819W

■ Dimension 外形封装尺寸 SOD-123



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0,037	0,053	0,95	1,35
B	0,000	0,005	0,00	0,12
C	-	0,008	-	0,20
D	0,055	0,071	1,40	1,80
E	0,098	0,110	2,50	2,80
F	0,142	0,154	3,60	3,90
G	0,016	-	0,40	-
H	0,020	0,028	0,50	0,70