

SOD-523 Schottky Barrier Diode 肖特基势垒二极管

Internal Configuration & Device Marking 内部结构与产品打标

Type 型号	RB751S-40
Pin 管脚	
Mark 打标	

Absolute Maximum Ratings 最大额定值

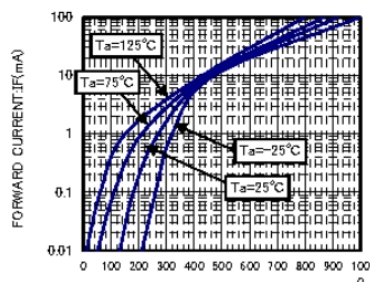
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RM}	40	V
DC Reverse Voltage 直流反向电压	V_R	30	
Forward Work Current 正向工作电流	I_o	30	mA
Peak Forward Surge Current 正向峰值浪涌电流	I_{FSM}	200	mA
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+125℃	

Electrical Characteristics 电特性

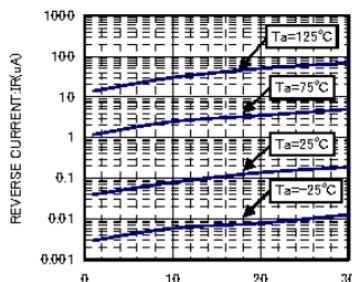
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Min 最小值	Max 最大值	Unit 单位
Reverse Breakdown Voltage 反向击穿电压($I_R=1\text{mA}$)	$V_{(BR)}$	40	—	V
Reverse Leakage Current 反向漏电流($V_R=30\text{V}$)	I_R	—	0.5	μA
Forward Voltage 正向电压($I_F=1\text{mA}$)	V_F		0.37	V
Diode Capacitance 二极管电容($V_R=1\text{V}$, $f=1\text{MHz}$)	C_D	2	—	pF
Reverse Recovery Time 反向恢复时间	T_{rr}	—	5	nS

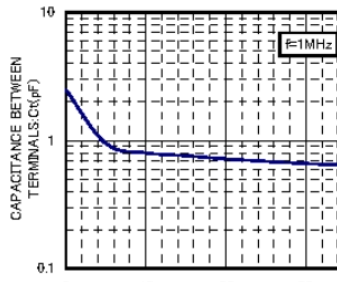
■ Typical Characteristic Curve 典型特性曲线



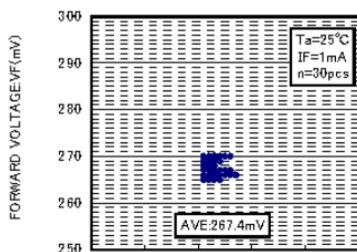
VF-IF CHARACTERISTICS
VF分布



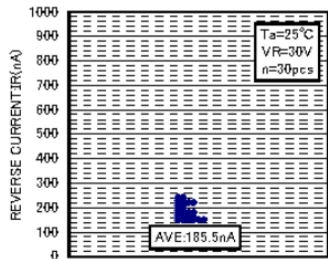
VR-IR CHARACTERISTICS



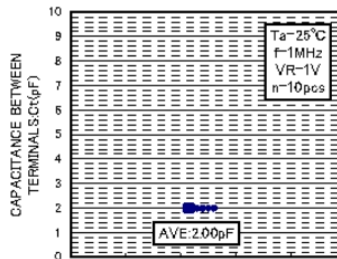
VR-Ct CHARACTERISTICS



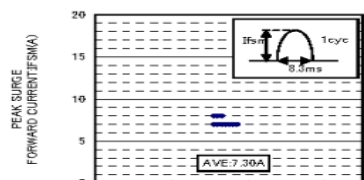
VF DISPERSION MAP



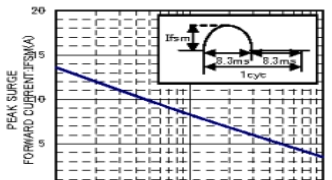
IR DISPERSION MAP



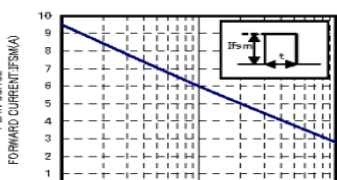
Ct DISPERSION MAP



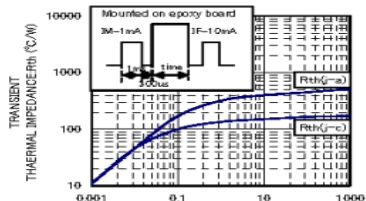
IFSM DISPERSION MAP



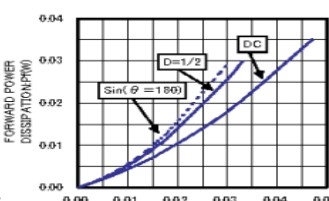
IFSM-CYCLE CHARACTERISTICS



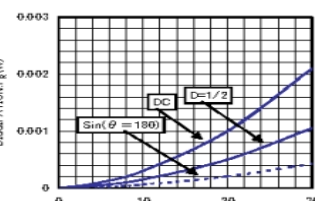
IFSM-t CHARACTERISTICS



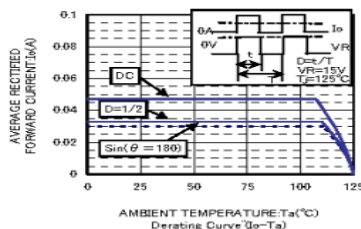
Rth-t CHARACTERISTICS



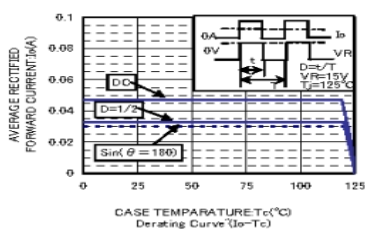
AVERAGE RECTIFIED
FORWARD CURRENT (IA)
IA-PF CHARACTERISTICS



REVERSE VOLTAGE (VR)
VR-PR CHARACTERISTICS

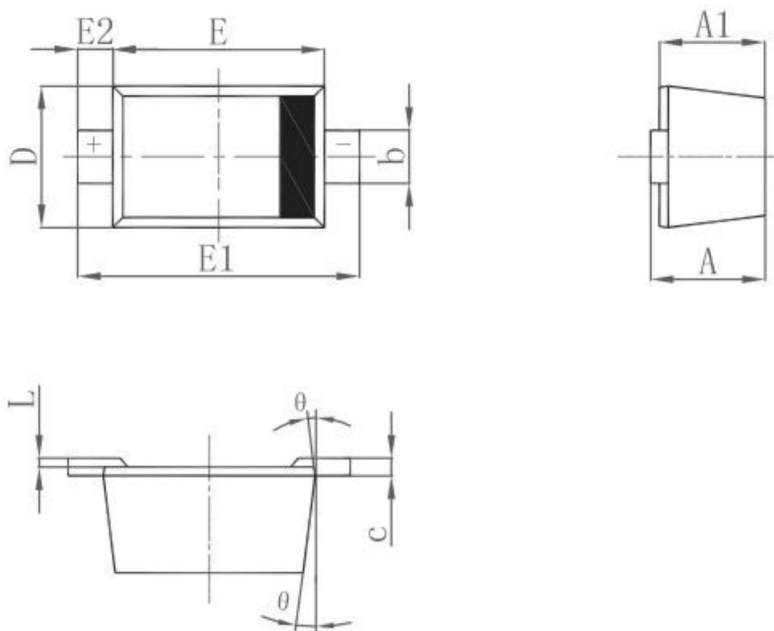


AMBIENT TEMPERATURE (Ta) (°C)
Derating Curve (IA-Ta)



CASE TEMPERATURE (Tc) (°C)
Derating Curve (IA-Tc)

■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	