

SOD-323 General Purpose Rectifier Diode 通用整流二极管

■Features 特点

Low forward voltage drop 低正向压降
Low reverse leakage current 低反向漏电流
High surge current capability 高浪涌电流能力
High Reliability 高可靠性
Case 封装:SOD-323



■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	1N400 1WS	1N400 2WS	1N400 3WS	1N400 4WS	1N400 5WS	1N400 6WS	1N400 7WS	Unit 单位
Marking 印字		1A	2A	3A	4A	5A	6A	7A	
Peak Reverse Voltage 反向峰值电压	V_{RRM}	50	100	200	400	600	800	1000	V
DC Reverse Voltage 直流反向电压	V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	35	70	140	280	420	560	700	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
Thermal Resistance Junction-Lead 结到管脚热阻	$R_{\theta JL}$	35							$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	$150^{\circ}\text{C}, -55\text{to}+150^{\circ}\text{C}$							

■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	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Test Condition 测试条件
Forward Voltage 正向电压	V_F		0.92 0.98	1.1	V	$I_F=0.5\text{A}$ $I_F=1\text{A}$
Reverse Current($T_A=25^{\circ}\text{C}/$) 反向电流($T_A=125^{\circ}\text{C}/$)	I_R			5 50	μA	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	C_D		15		pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

Fig.1 Forward Current Derating Curve

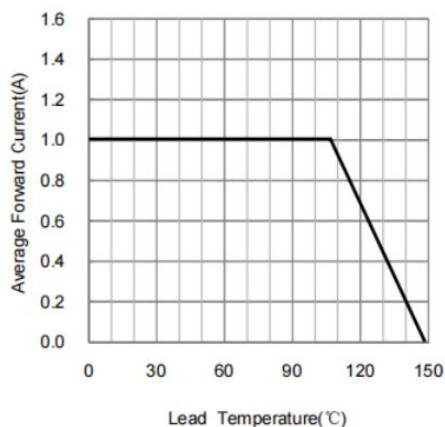


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

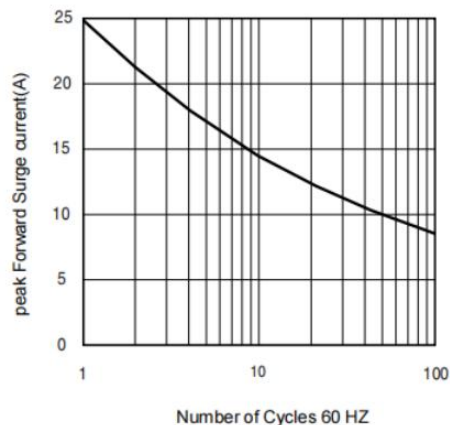


Fig.3 Typical Instantaneous Forward Characteristics

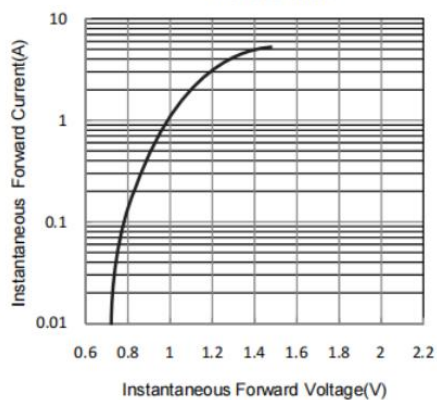
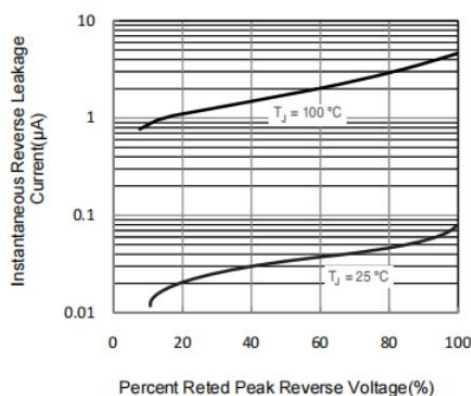
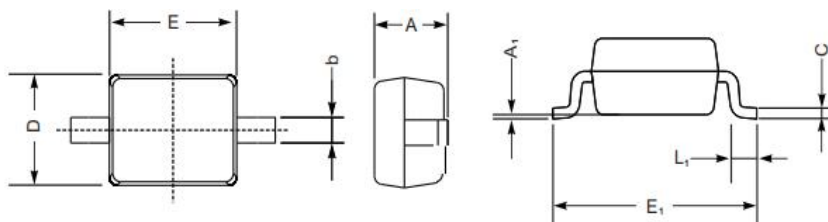


Fig.4 Typical Reverse Leakage Characteristics



■ Dimension 外形封装尺寸



UNIT		A	C	D	E	E ₁	b	L ₁	A ₁
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—
mil	max	43	5.9	55	70	108	16	16	8
	min	32	3.1	47	63	100	9.8	7.9	—