

B16WS

Rev.A Nov.-2023

描述 / Descriptions

SOD-323 塑封封装 肖特基二极管。

Schottky Diode in a SOD-323 Plastic Package.

特征 / Features

低正向压降，高浪涌电流能力，无卤产品。

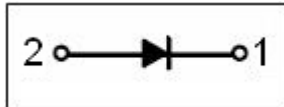
Low forward voltage drop, High surge current capability, HF Product.

用途 / Applications

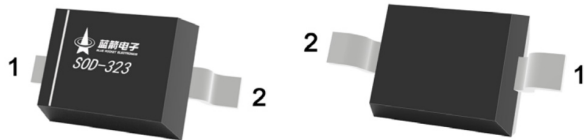
用于低压、高频逆变器。

For use in low voltage, high frequency inverters.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1:Cathode

PIN2:Anode

印章代码 / Marking

Model	B16WS
Marking	SM

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Maximum recurrent peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Continuous forward current	I_F	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	A
Total capacitance $V_R=4V, f=1MHz$	C_{tot}	120	pF
Total power dissipation	P_{tot}	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0A$	0.7	V
Reverse current	I_R	$V_R=60V$	0.1	mA

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Power Derating Curve

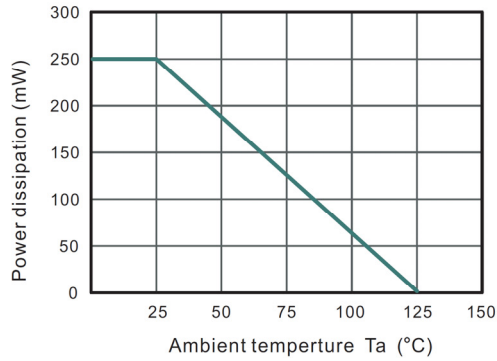


Fig.2 Typical Reverse Characteristics

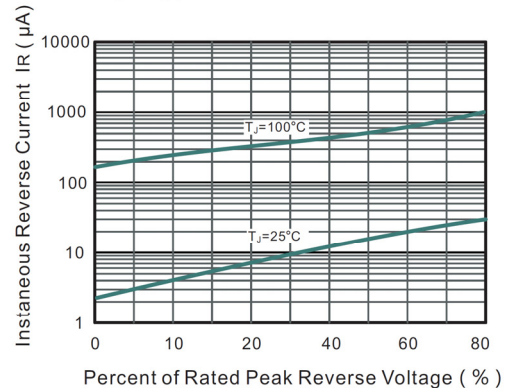


Fig.3 TYPICAL FORWARD VOLTAGE

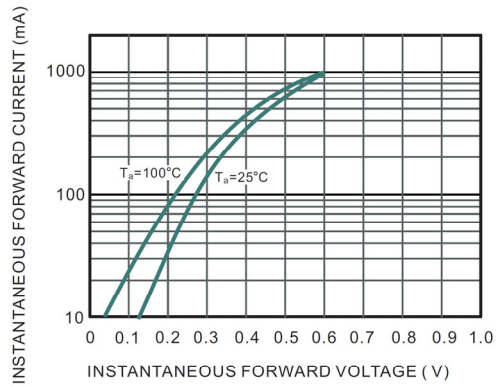


Fig.4 Typical Junction Capacitance

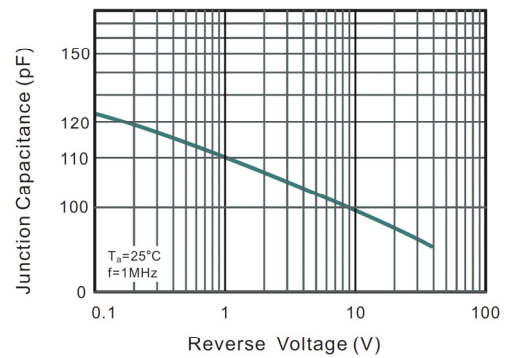


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

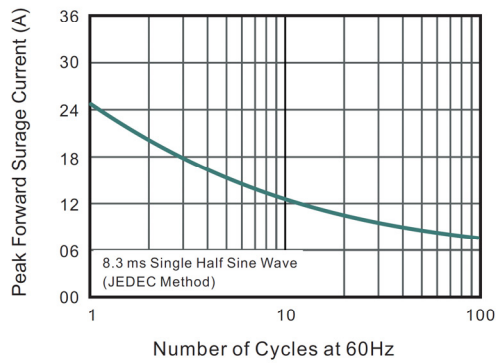
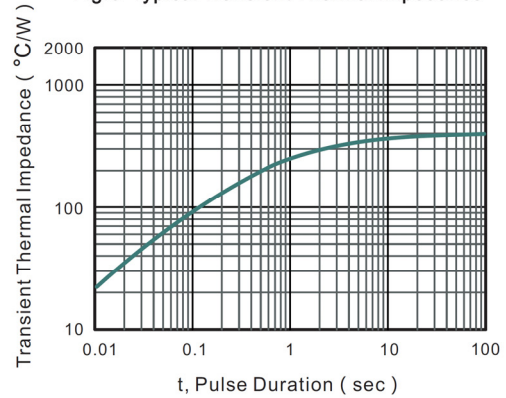
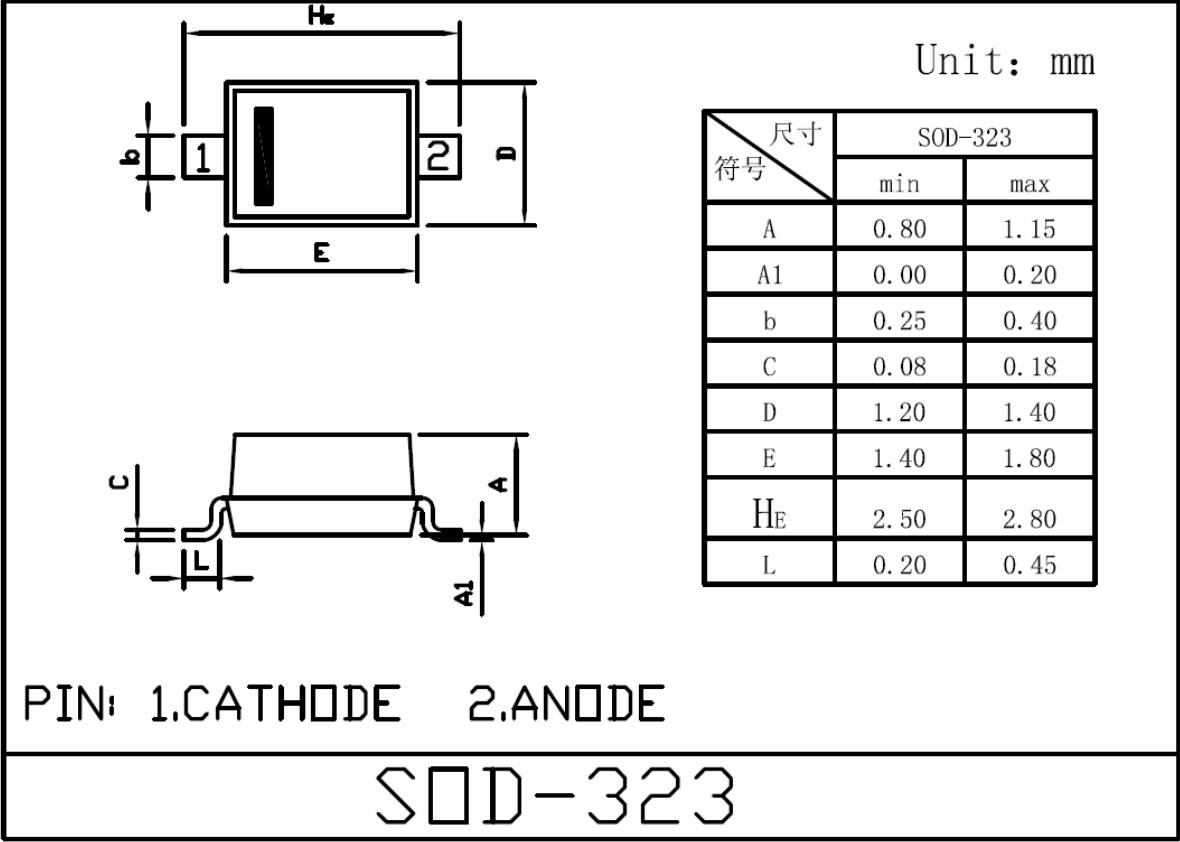


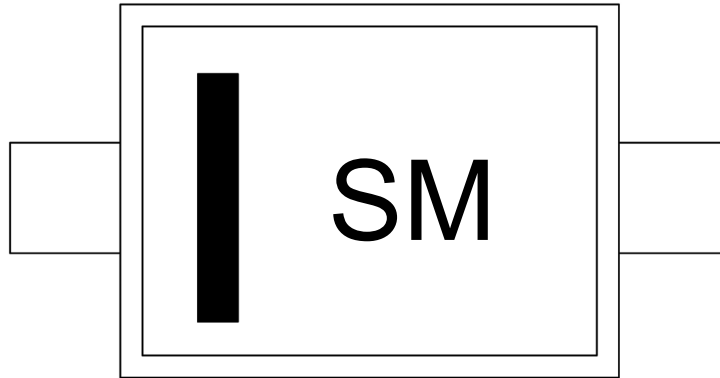
Fig.6 Typical Transient Thermal Impedance



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



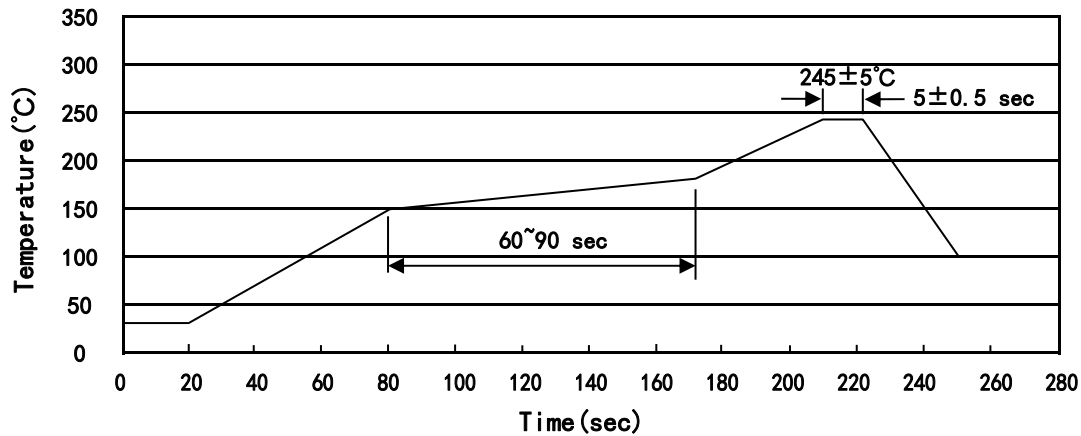
说明：

SM: 为型号代码

Note:

SM: Product Type Code

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOD-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices