

B0520W-B0540W

Rev.A Jul.-2020

描述 / Descriptions

SOD-123 塑封封装 硅半导体二极管。
Silicon Diode in a SOD-123 Plastic Package.

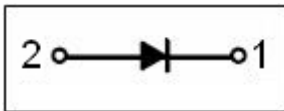
特征 / Features

低正向压降、用于瞬态保护的护环结构。高电导，也有无铅版本。无卤产品。
Low forward voltage drop, Guard ring construction for transient Protection. High Conductance, Also Available in Lead Free Version. HF Product.

用途 / Applications

半导体二极管。
Silicon diode.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1:Cathode PIN2:Anode

放大及印章代码 / h_{FE} Classifications & Marking

Model	B0520W	B0530W	B0540W
Marking	HSD	HSE	HSF

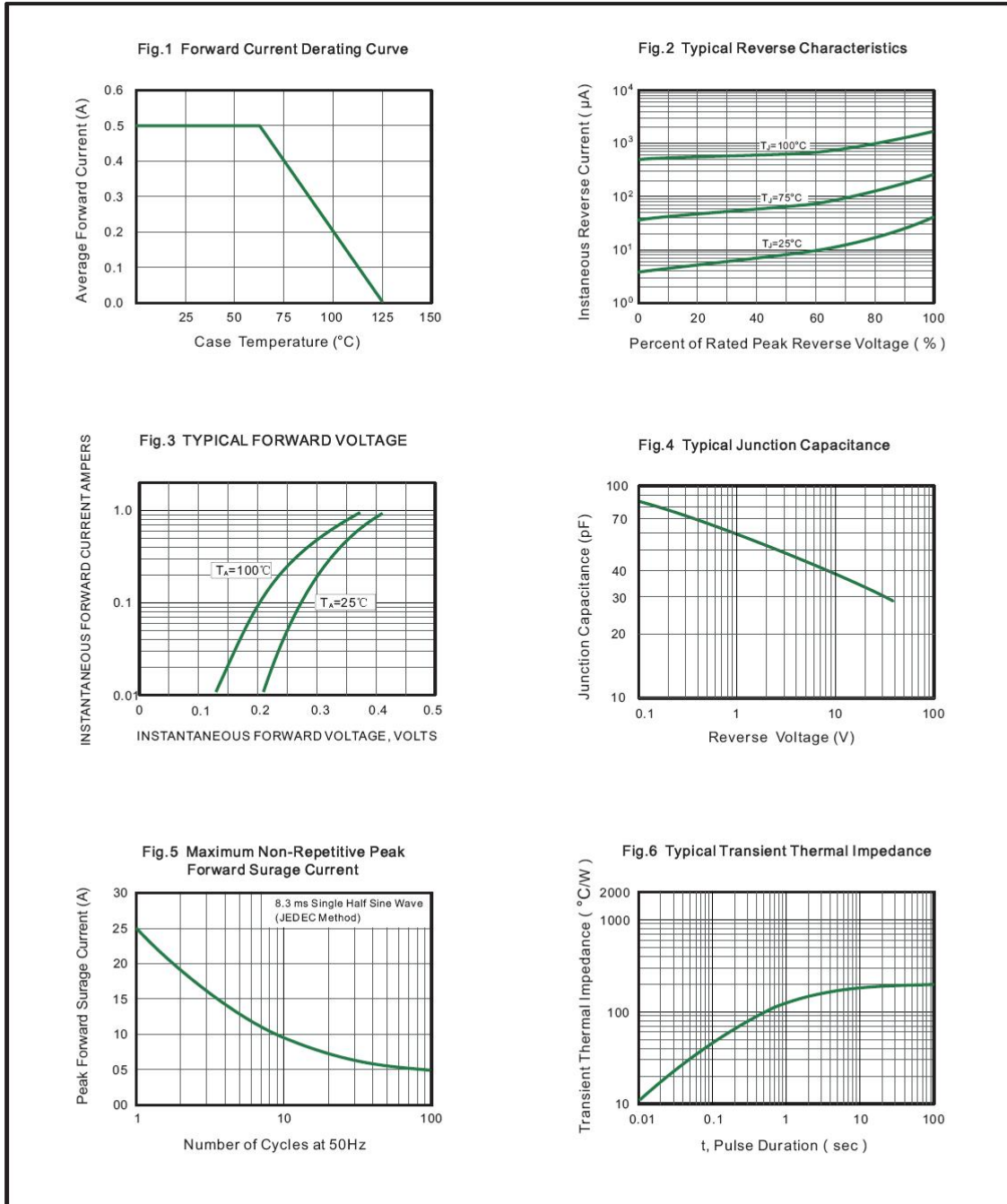
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating			单位 Unit
		B0520W	B0530W	B0540W	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25			A
Maximum Average Forward Current at Ta=25°C	I_O	0.5			A
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200			°C/W
Junction temperature	T_j	-55 ~ +125			°C
Storage Temperature Range	T_{stg}	-55 ~ +150			°C

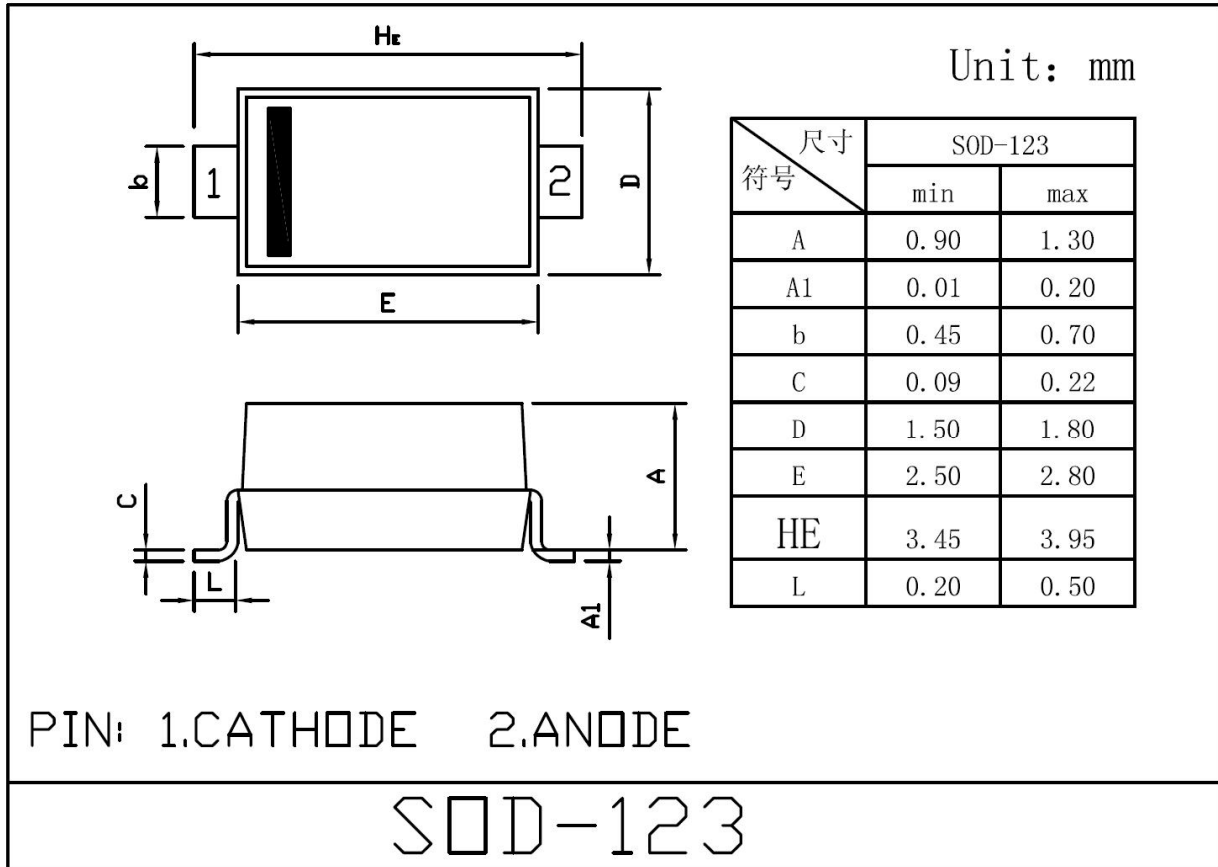
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating			单位 Unit
			B0520W	B0530W	B0540W	
Maximum Instantaneous Forward Voltage	V_F	$I_F=0.1A$	0.330	0.375	-	V
		$I_F=0.5A$	0.390	0.430	0.510	
		$I_F=1.0A$	-	-	0.620	
Reverse Current	I_R	$V_R=10V$	75	-	-	μA
		$V_R=15V$	-	20	-	
		$V_R=20V$	250	-	10	
		$V_R=30V$	-	130	-	
		$V_R=40V$	-	-	20	

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

H： 为公司代码

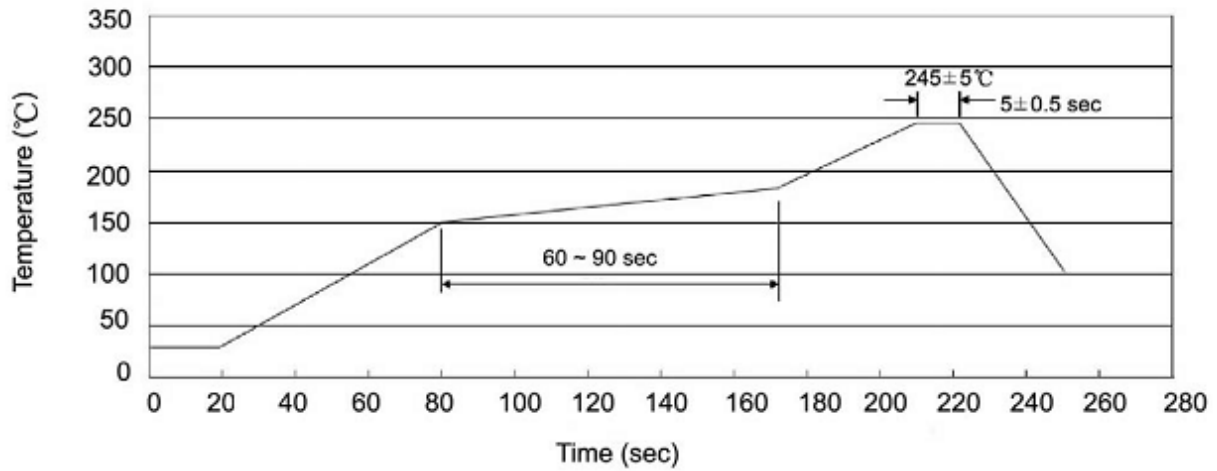
SE： 为型号代码

Note:

H: Company Code.

SE: Product Type.

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:105~180°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-123	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices