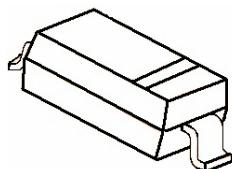


# B0520W/B0530W/B0540W

## SOD-123



**Marking:** B0520W: SD

B0530W: SE

B0540W: SF

## SOD-123 贴片塑封肖特基二极管

### SOD-123 Plastic-Encapsulate Schottky Barrier Diode

#### 特征 Features

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop

#### 机械数据 Mechanical Data

- 封装: SOD-123 封装 SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性( $TA = 25^\circ\text{C}$  除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	B0520W	B0530W	B0540W	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	V
最大均方根电压 Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	V
最大直流阻断电压 Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	V
最大正向平均整流电流 Maximum average forward rectified current	I <sub>FM</sub>	0.5			A
峰值正向浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I <sub>FSM</sub>	5.5			A
典型热阻 Typical thermal resistance	R <sub>θJA</sub>	200			°C/W
功率消耗 Power Dissipation	P <sub>D</sub>	500			mW
存储温度 Storage temperature range	T <sub>STG</sub>	-50-+150			°C
Voltage rate of change	D <sub>v/dt</sub>	1000			V/uS

电特性 ( $TA = 25^\circ\text{C}$  除非另有规定)

**Electrical Characteristics** (Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	测试条件 Test conditions	B0520W	B0530W	B0540W	单位 Unit
最大正向电压 Maximum forward voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1A	0.330	0.375	---	V
		I <sub>F</sub> = 0.5A	0.385	0.430	0.510	
		I <sub>F</sub> = 1.0A	---	---	0.620	
最大反向电压 Maximum reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> =250uA	20	---	---	V
		I <sub>R</sub> =200uA	---	30	---	
		I <sub>R</sub> =20.0uA	---	---	40	
最大反向电流 Maximum reverse current	I <sub>R</sub>	VR=10V	75	---	---	uA
		VR=15V	---	20	---	
		VR=20V	250	---	10	
		VR=30V	---	130	---	
		VR=40V	---	---	20	
Capacitance between terminals	C <sub>T</sub>	VR = 0V, f = 1MHz			170	pF



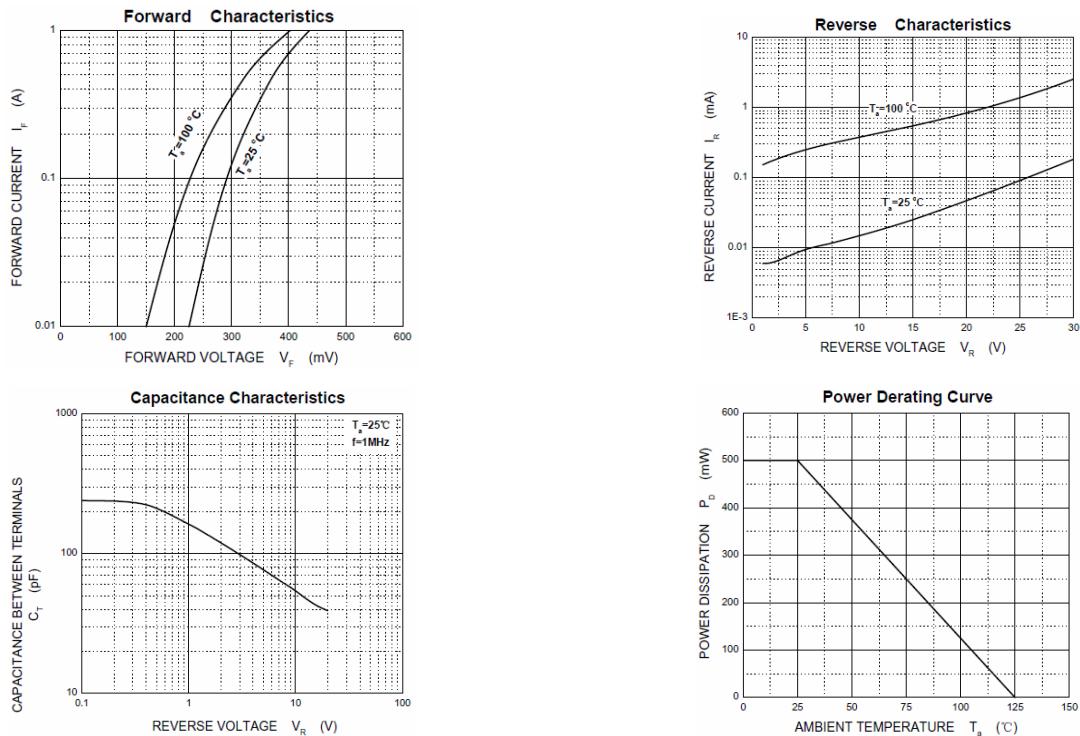
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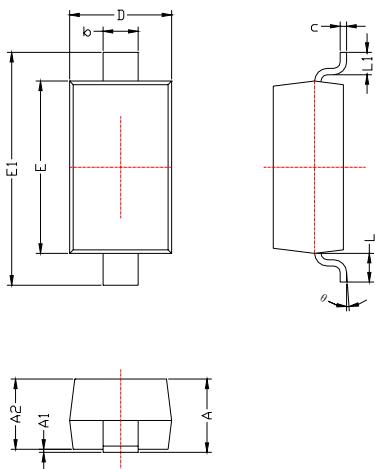
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# B0520W/B0530W/B0540W

## 特性曲线Characteristic Curves

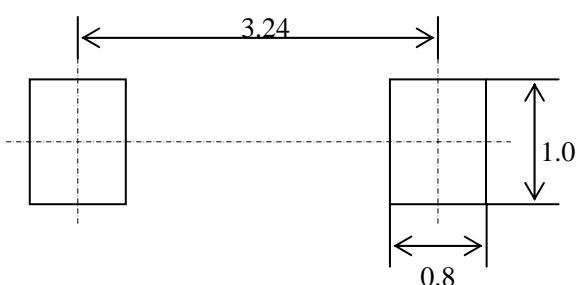


## SOD-123 PACKAGE OUTLINE Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
$\theta$	0°	8°

**焊盘设计参考** Precautions: PCB Design(Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs)



技术要求:

- 中心距: 3.24      1, 塑封体尺寸: 2.70 X 1.60
- 脚 宽: 0.55      2: 未注公差为:  $\pm 0.05$
- 焊盘宽: 1.00      3, 所有单位: mm
- 脚 长: 0.50
- 焊盘长: 0.80



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