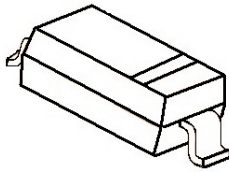


# B0520W/B0530W/B0540W

## 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°C 除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°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	VRRM	20	30	40	V
最大均方根电压 Maximum RMS voltage	VRMS	14	21	28	V
最大直流阻断电压 Maximum DC blocking voltage	VDC	20	30	40	V
最大正向平均整流电流 Maximum average forward rectified current	IFM	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	IFSM	5.5			A
典型热阻 Typical thermal resistance	RθJA	200			°C/W
功率消耗 Power Dissipation	PD	500			mW
存储温度 Storage temperature range	TSTG	-50-+150			°C
电压率 of change Voltage rate of change	Dv/dt	1000			V/uS

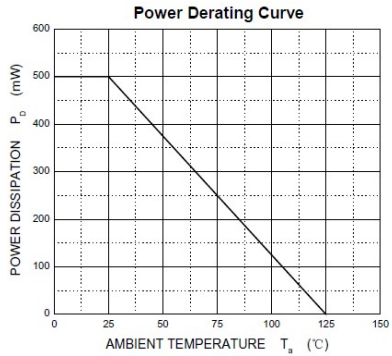
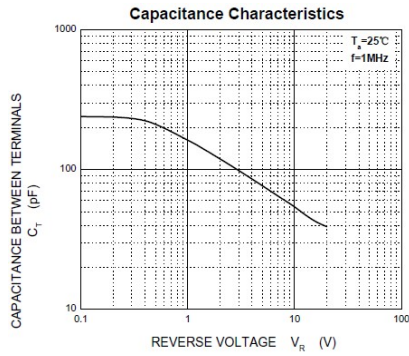
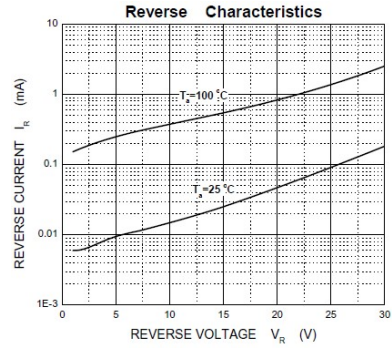
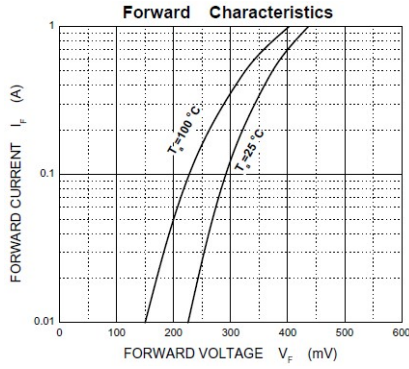
电特性 (TA = 25°C 除非另有规定)

**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

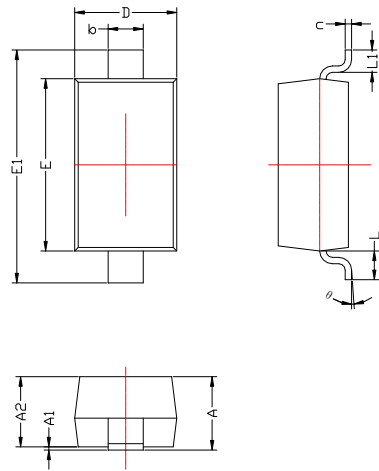
参数 Parameters	符号 Symbol	测试条件 Test conditions	B0520W	B0530W	B0540W	单位 Unit
最大正向电压 Maximum forward voltage	VF	IF = 0.1A	0.330	0.375	---	V
		IF = 0.5A	0.385	0.430	0.510	
		IF = 1.0A	---	---	0.620	
最大反向电压 Maximum reverse breakdown voltage	VR	IR=250uA	20	---	---	V
		IR=200uA	---	30	---	
		IR=20.0uA	---	---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

# B0520W/B0530W/B0540W

## 特性曲线 Characteristic Curves

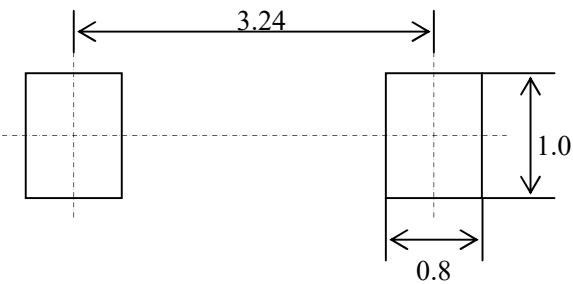


## SOD-123 PACKAGE OUTLINE Plastic surface mounted package



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)



- 中心距: 3.24
- 脚宽: 0.55
- 焊盘宽: 1.00
- 脚长: 0.50
- 焊盘长: 0.80

### 技术要求:

- 1, 塑封体尺寸: 2.70 X 1.60
- 2, 未注公差为:  $\pm 0.05$
- 3, 所有单位: mm