

BZX584CXXX

Rev.C Dec.-2024

描述 / Descriptions

SOD-523 塑封封装 稳压二极管。

Zener Diode in a SOD-523 Plastic Package.

特征 / Features

200mW 功耗，中等电流，自动贴片组装，无卤产品。

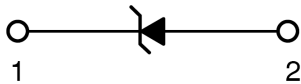
200mW Power dissipation, medium current, automated assembly processes, HF Product.

用途 / Applications

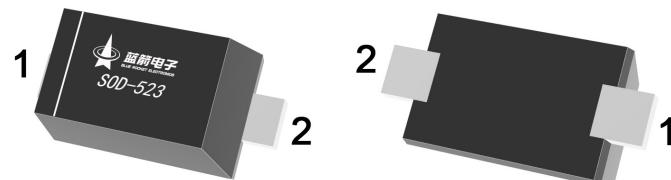
适用于 2.4V-39V 的宽范围稳压电路。

2.4V to 39V wide zener voltage range applications.

内部等效电路 / Equivalent Circuit



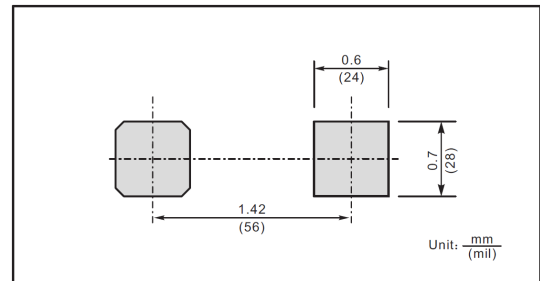
引脚排列 / Pinning



PIN1:Cathode

PIN2:Anode

The recommended mounting pad size



印章代码 / Marking

见电性能参数。

See Electrical Characteristics.

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

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Forward Voltage (I _F =10mA)	V _F	0.9	V
Power Dissipation	P _D	200	mW
Typical Thermal Resistance Junction to Ambient	R _{θJA}	833	°C/W
Junction and Storage Temperature Range	T _j , T _{stg}	-55~150	°C

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

Type Number	Marking Code	Zener Voltage Range(Note 1)				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z @I _{ZT}			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R @V _R	V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)		(mA)	Max (μA)	(V)
BZX584C2V4	Z7	2.3	2.4	2.5	5	100	1000	1	120	1
BZX584C2V7	A8	2.6	2.7	2.8	5	100	1000	1	120	1
BZX584C3V0	B8	2.9	3	3.2	5	100	1000	1	50	1
BZX584C3V3	C8	3.1	3.3	3.5	5	95	1000	1	20	1
BZX584C3V6	D8	3.4	3.6	3.8	5	90	1000	1	10	1
BZX584C3V9	E8	3.7	3.9	4.1	5	90	1000	1	5	1
BZX584C4V3	F8	4.1	4.3	4.5	5	90	1000	1	5	1
BZX584C4V7	G8	4.5	4.7	4.9	5	80	800	1	2	1
BZX584C5V1	H8	4.8	5.1	5.4	5	60	500	1	2	1.5
BZX584C5V6	I8	5.3	5.6	5.9	5	40	200	1	1	2.5
BZX584C6V2	J8	5.9	6.2	6.5	5	10	100	1	1	3
BZX584C6V8	K8	6.5	6.8	7.1	5	15	160	1	0.5	3.5
BZX584C7V5	L8	7.1	7.5	7.9	5	15	160	1	0.5	4
BZX584C8V2	M8	7.8	8.2	8.6	5	15	160	1	0.5	5
BZX584C9V1	N8	8.6	9.1	9.6	5	15	160	1	0.5	6
BZX584C10	O8	9.5	10	10.5	5	20	160	1	0.1	7

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

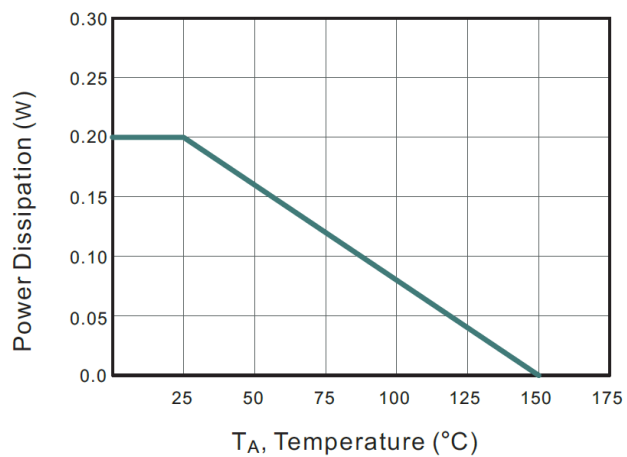
Type Number	Marking Code	Zener Voltage Range(Note 1)				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z @I _{ZT}			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R @V _R	V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)		(mA)	Max (μA)	(V)
BZX584C11	P8	10.5	11	11.6	5	20	160	1	0.1	8
BZX584C12	Q8	11.4	12	12.6	5	25	80	1	0.1	9
BZX584C13	R8	12.6	13.25	13.9	5	30	80	1	0.1	10
BZX584C15	S8	14.3	15	15.8	5	30	80	1	0.1	11
BZX584C16	T8	15.4	16.2	17.0	2	40	80	1	0.1	12
BZX584C18	U8	17.1	18	18.9	2	45	80	1	0.1	13
BZX584C20	V8	19.0	20	21.0	2	55	100	1	0.1	15
BZX584C22	W8	20.9	22	23.1	2	55	100	1	0.1	17
BZX584C24	X8	23.0	24.2	25.4	2	70	120	1	0.1	19
BZX584C27	Y8	25.7	27	28.4	2	80	300	1	0.1	21
BZX584C30	Z8	28.5	30	31.5	2	80	300	1	0.1	23
BZX584C33	A9	31.4	33	34.7	2	80	300	1	0.1	25
BZX584C36	B9	34.2	36	37.8	2	90	500	1	0.1	27
BZX584C39	C9	37.1	39	41.0	2	130	500	1	2	30

Notes:

- (1) V_{ZT} is tested with pulses (20 ms)
- (2) C:±5%

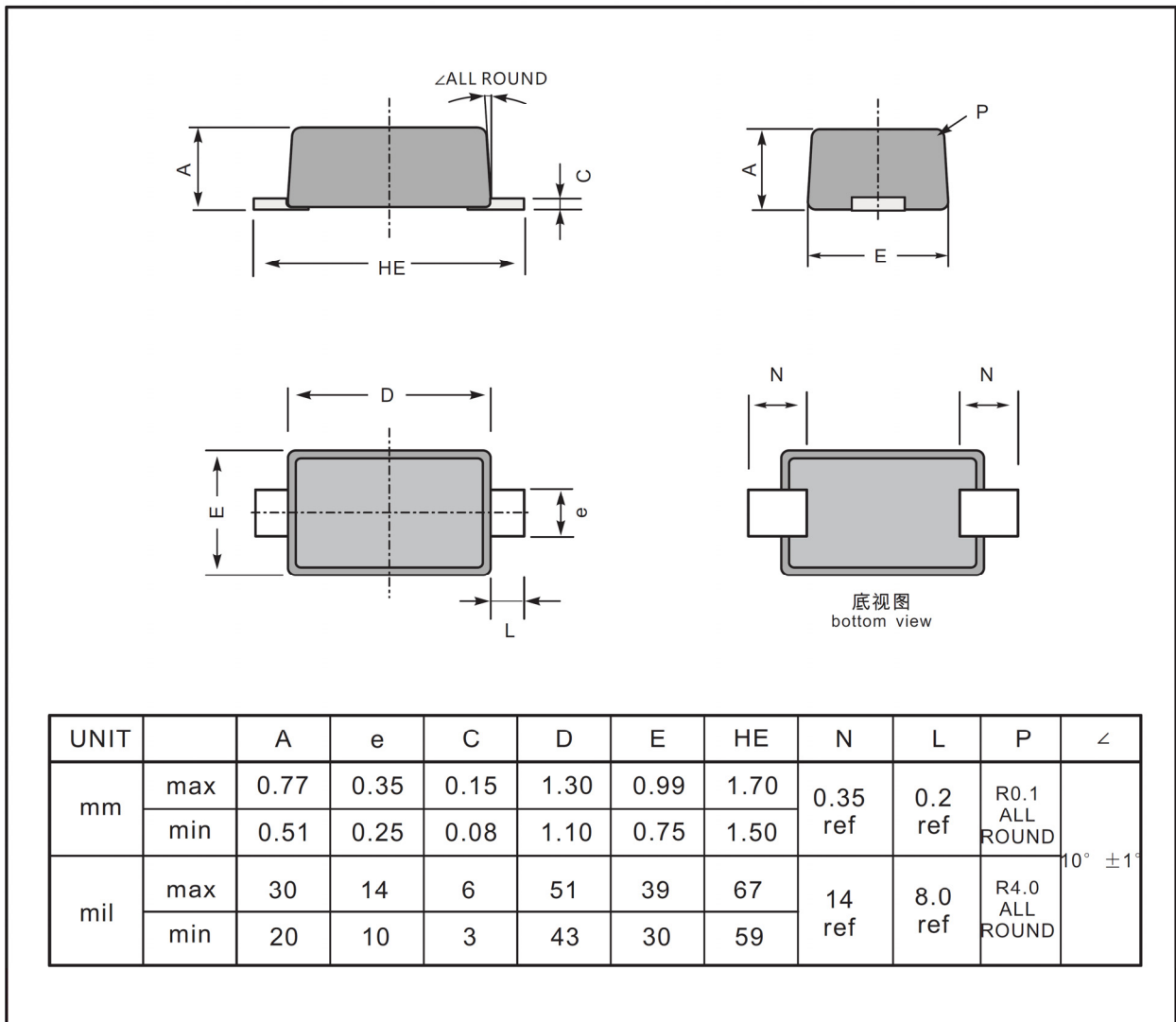
电参数曲线图 / Electrical Characteristic Curve

Fig.1 Maximum Continuous Power Derating

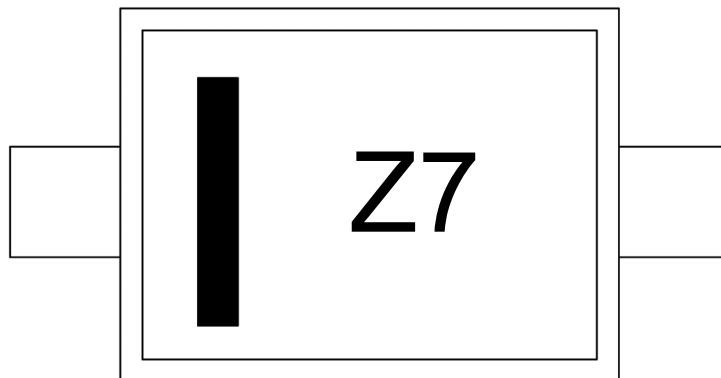


外形尺寸图 / Package Dimensions

SOD-523



印章说明 / Marking Instructions



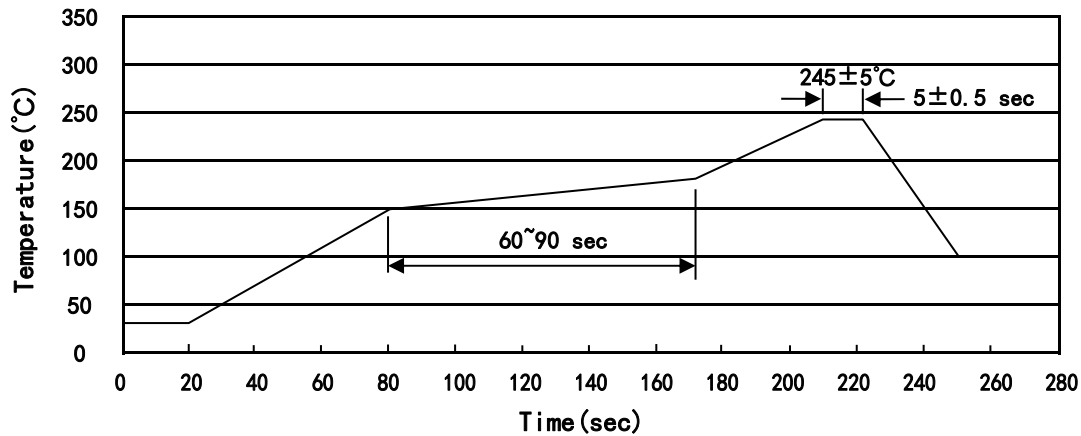
说明：

Z7： 为型号代码

Note:

Z7: 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-523	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices