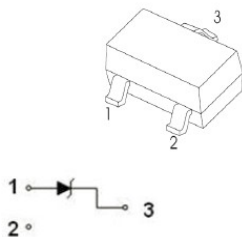


SOT-23



特征 Features

齐纳击穿阻抗低; Low Zener Impedance
最大功率耗散 300mW; Power Dissipation of 300mW
高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
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	数值 Value	单位 Unit
功率消耗 Power Dissipation.(Note 1)	Pd	300	mW
正向压降 Forward Voltage @IF=10mA.(Note 2)	Vf	0.9	V
存储温度 Storage temperature range	Ts	-65-+150	°C
Thermal resistance junction to ambient air Warmewider stand Sperrschicht –umgebende Luft	RthA	417	K/W

NOTES: 1) Valid provided that device terminals are kept at ambient temperature.
2) Test with pulse, period=5ms, pulse width=300us. 3) f=1KHz

电特性 (TA = 25°C 除非另有规定)

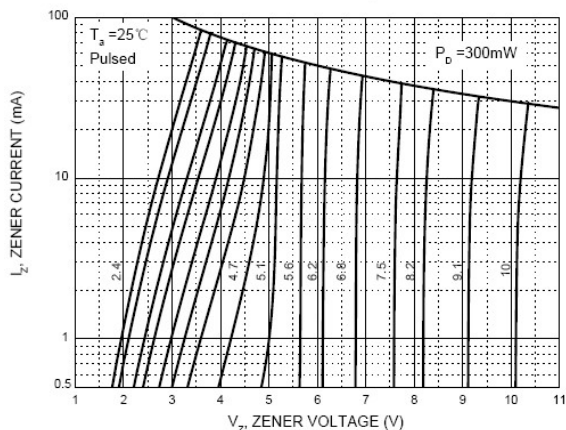
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Device	Marking	Zener Voltage Range Vz			Maximum Zenner Impedance			Reverse Current I _r		Temperature Coefficient of Zener voltage @I _{zt} =5mA mV/°C	
					Zzt	Zzk					
		Min	Max	Izt	Max	Max	Izk	Max	VR		
		(V)	(V)	mA	Ω	Ω	mA	uA	V		
BZX84C6V8	Z5	6.40	7.20	5	15	80	1.0	2.0	4.0	1.2	4.5

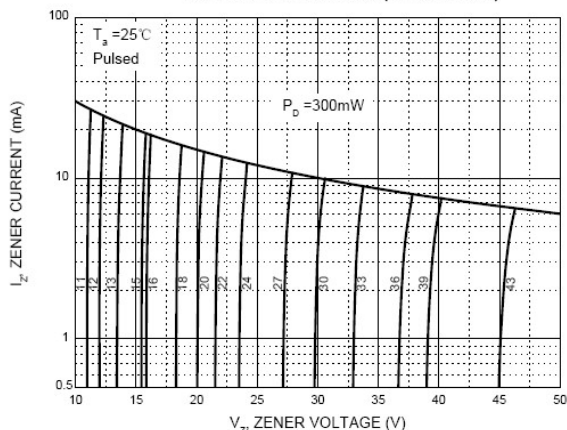
Breakdown characteristics

at $T_j = \text{constant}$ (pulsed)

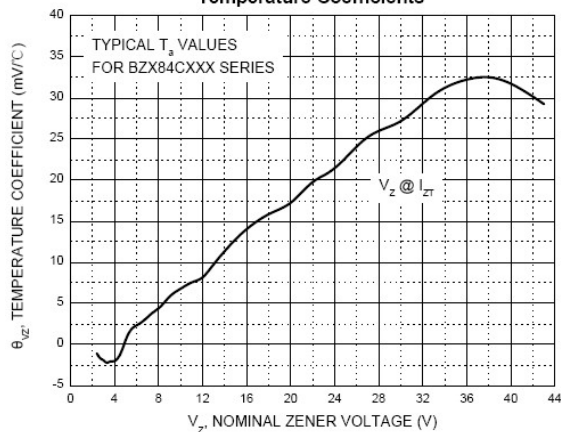
Zener Characteristics (V_z Up to 10 V)



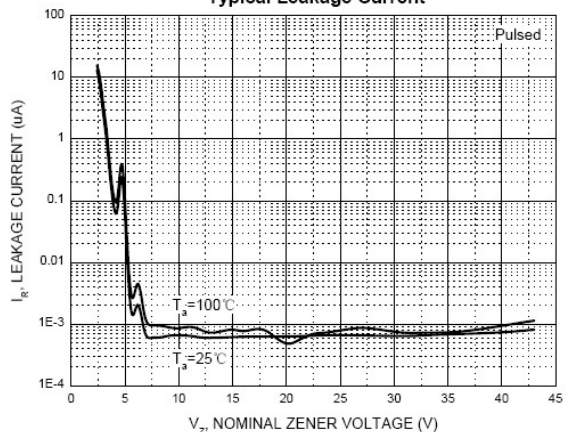
Zener Characteristics (11 V to 43 V)



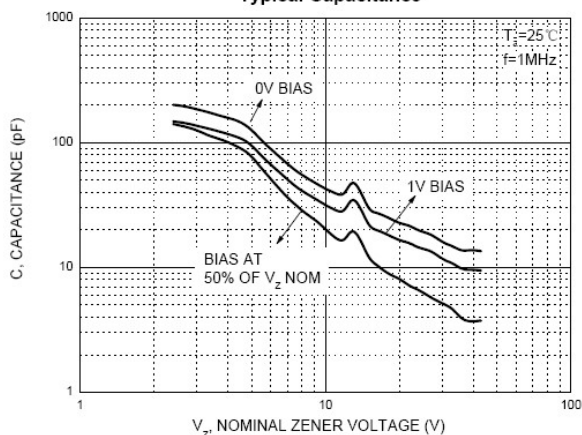
Temperature Coefficients



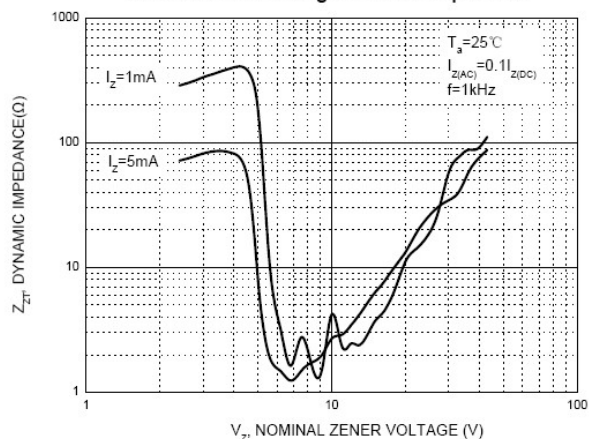
Typical Leakage Current



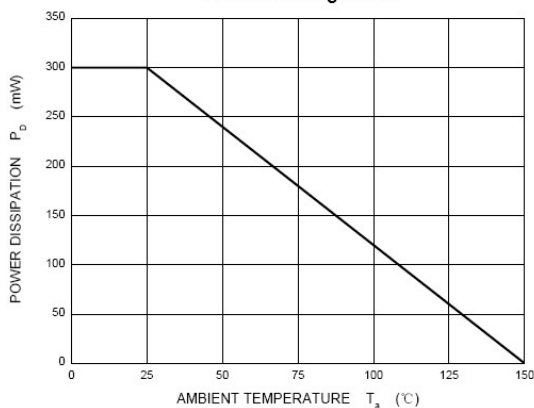
Typical Capacitance

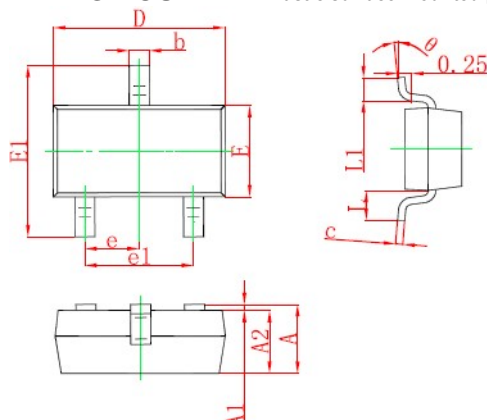


Effect of Zener Voltage on Zener Impedance



Power Derating Curve

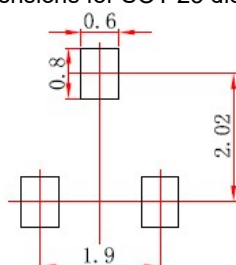


SOT-23 PACKAGE OUTLINE Plastic surface mounted package


Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°		8°	

焊盘设计参考Precautions: PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs


Note:

1. Controlling dimension: In millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

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