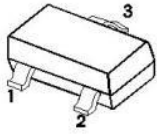


SOT-23

SOT-23 贴片塑封稳压二极管
SOT-23 Plastic-Encapsulate Zener Diode

特征 Features

共阳极双稳压二极管 Dual zeners in common anode configuration.
最大功率耗散 300mW; Power Dissipation of 300mW
适合自动插件生产 Ideally suited for automatic insertion.

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.)

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Power Dissipation	P _D	300	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	417	°C / W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

电特性 (TA = 25°C 除非另有规定)

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

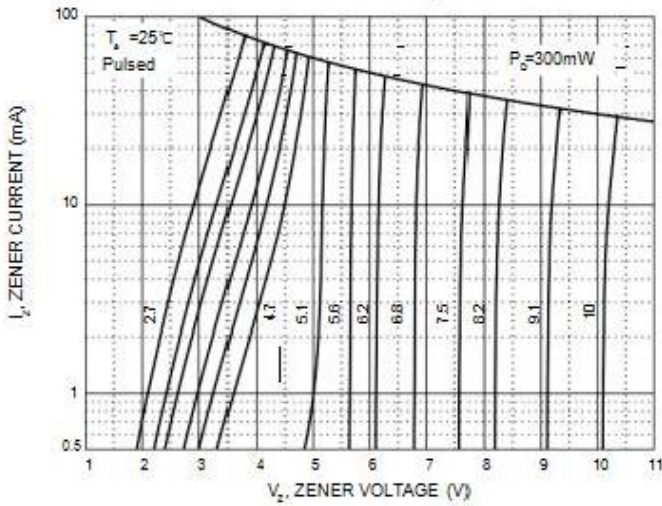
Type Number	Marking Code	Zener Voltage Range (note1)	Maximum Zener Impedance (note 2)		Min Reverse Voltage (note1)
		@ I _{ZT} =5.0mA	Z _{ZT} @I _{ZT} =5.0mA	Z _{Zk} @I _{Zk} =1.0mA	@I _R =0.1μA
		V _Z (V)	Ω	Ω	V _R (V)
AZ23C2V7	KD1	2.5-2.9	83	500	—
AZ23C3V0	KD2	2.8-3.2	95	500	—
AZ23C3V3	KD3	3.1-3.5	95	500	—
AZ23C3V6	KD4	3.4-3.8	95	500	—
AZ23C3V9	KD5	3.7-4.1	95	500	—
AZ23C4V3	KD6	4.0-4.6	95	500	—
AZ23C4V7	KD7	4.4-5.0	78	500	—
AZ23C5V1	KD8	4.8-5.4	60	480	0.8
AZ23C5V6	KD9	5.2-6.0	40	400	1.0
AZ23C6V2	KDA	5.8-6.6	10	200	2.0
AZ23C6V8	KDB	6.4-7.2	8.0	150	3.0
AZ23C7V5	KDC	7.0-7.9	7.0	50	5.0
AZ23C8V2	KDD	7.7-8.7	7.0	50	6.0
AZ23C9V1	KDE	8.5-9.6	10	50	7.0
AZ23C10	KDF	9.4-10.6	15	70	7.5
AZ23C11	KDG	10.4-11.6	20	70	8.5
AZ23C12	KDH	11.4-12.7	20	90	9.0
AZ23C13	KDI	12.4-14.1	25	110	10.0
AZ23C15	KDJ	13.8-15.6	30	110	11.0
AZ23C16	KDK	15.3-17.1	40	170	12.0
AZ23C18	KDL	16.8-19.1	50	170	14.0
AZ23C20	KDM	18.8-21.2	50	220	15.0

AZ23C22	KDN	20.8-23.3	55	220	17.0
AZ23C24	KDO	22.8-25.6	80	220	18.0
AZ23C27	KDP	25.1-28.9	80	250	20.0
AZ23C30	KDQ	28-32	80	250	22.5
AZ23C33	KDR	31-35	80	250	25.0
AZ23C36	KDS	34-38	90	250	27.0
AZ23C39	KDT	37-41	90	300	29.0

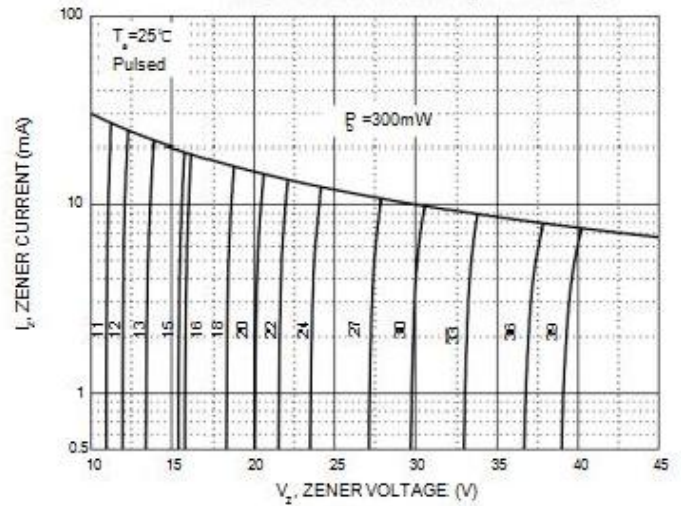
Notes: 1. Short duration test pulse used to minimize self-heating effect.
 2. $f=1\text{kHz}$

典型特性 Typical Characteristics

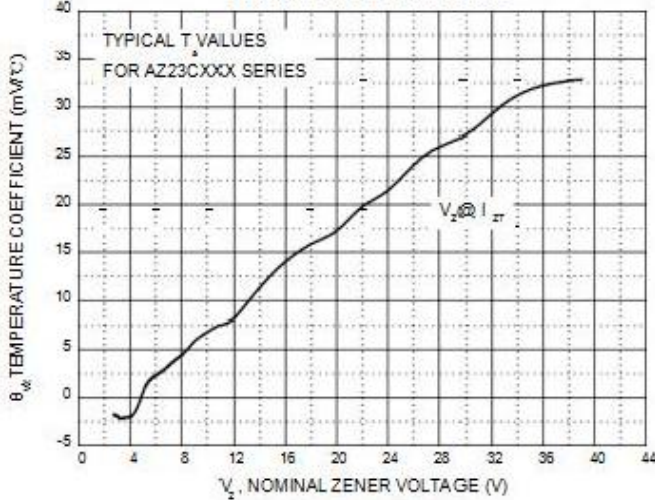
Zener Characteristics (V_z Up to 10 V)



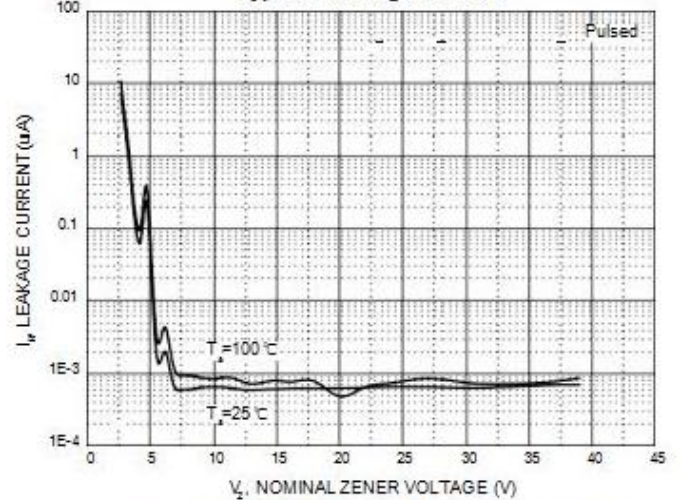
Zener Characteristics (11 V to 39 V)



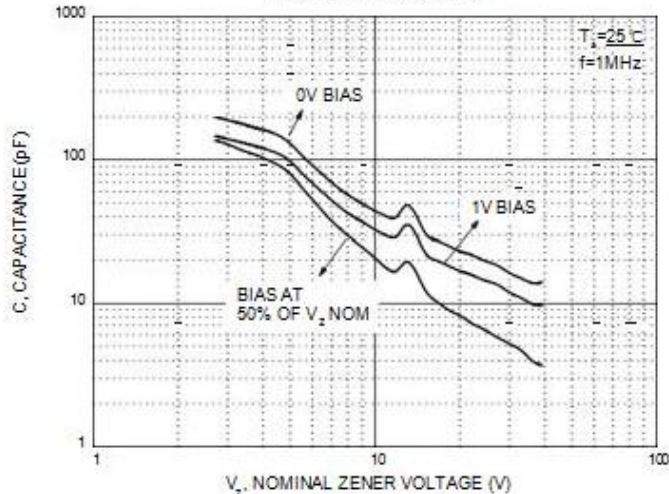
Temperature Coefficients



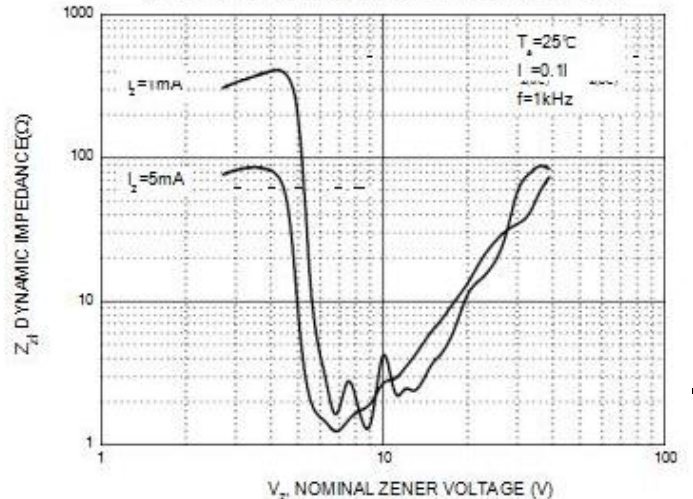
Typical Leakage Current

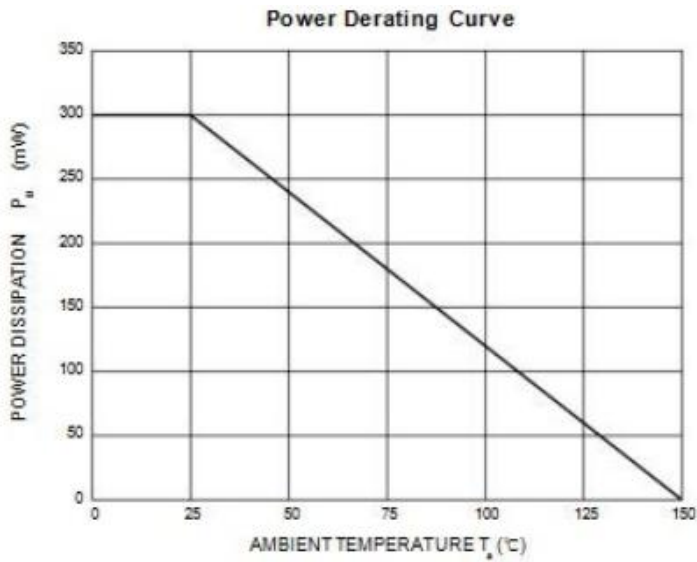


Typical Capacitance



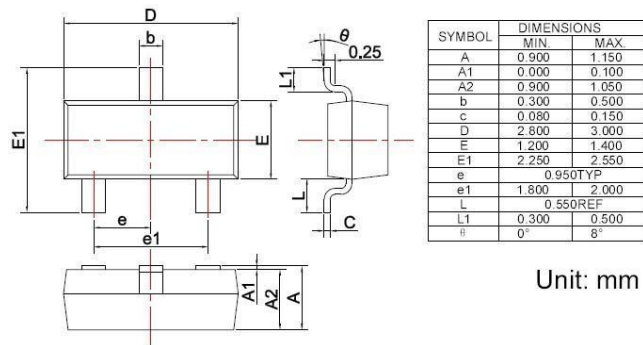
Effect of Zener Voltage on Zener Impedance





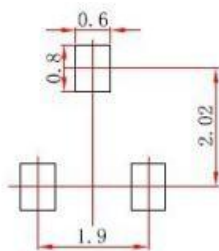
SOT-23封装外形图

SOT-23 PACKAGE OUTLINE Plastic surface mounted package



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: ±0.05mm.
 3. The pad layout is for reference purposes only.