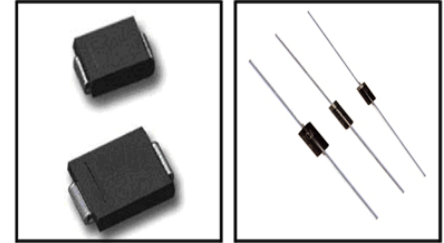


**[ 1N5333~1N5388 ]**
**特性/机械性能:**
**FEATURES/MECHANICAL DATE**

- ◆ 小电流下的齐纳阻抗低 Zener shed little electric impedance is low
- ◆ 高可靠性 High reliability
- ◆ 耐焊接热: 轴向产品250°C/10S, 引出端0.375" (9.5mm) 处。  
贴片产品250°C/10S, 引出端1.5mm处。



SMB/SMC

 DO-15  
 17-02  
 DO-201AE

Welding heat resistance: Axial product 250 °C / 10S, terminal 0.375 "(9.5 mm).

SMD product 250 °C / 10S, terminal 1.5 mm.

- ◆ 封 装: 模塑封装 Case: Molded plastic
- ◆ 引 线(端 子): 电镀可焊性符合MIL-STD-202E, 方法208C  
Lead(Terminal): solderable per MIL-STD-202, method 208 guaranteed
- ◆ 极 性: 色环表示阴极 Polarity: Color band denotes cathode

**最大额定值及电气特性:**
**MAXIMUM RATINGS AND CHARACTERISTICS**

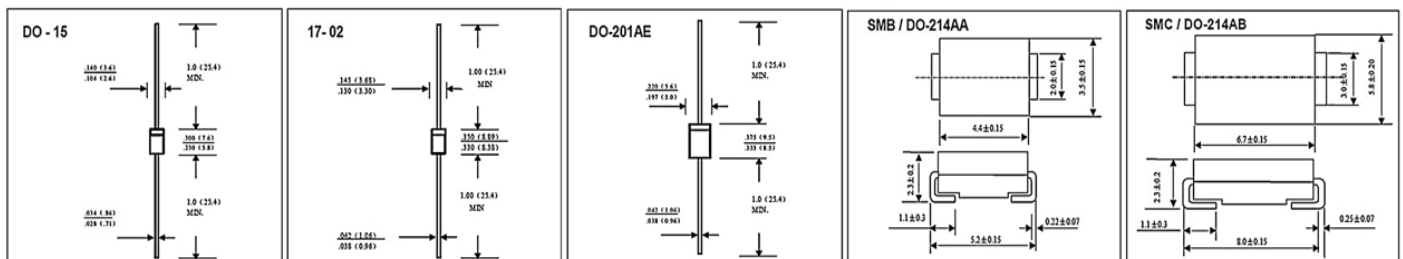
测量环境温度为25°C, 除非另有规定。

Rating at 25°C ambient temperature unless otherwise specified.

参数名称 Papt Number	符号Symbol	数值Value	单位Unit
齐纳电流 The zener current	I <sub>Z</sub> MAX	见表See table	mA
耗散功率@Ta=75°C Power Dissipation@Ta=75°C	P <sub>t</sub>	5	W
正向电压@IF=1.0A Forward voltage@IF=1.0A	V <sub>F</sub>	1.2	V
热阻抗 Thermal impedance	R <sub>θ</sub> (ja)	20	°C/W
使用及储存温度范围(贴片) Operating and Storage Temperature Range (Axial)	T <sub>J</sub> , T <sub>STG</sub>	-55~+150	°C
使用及储存温度范围(轴向) Operating and Storage Temperature Range (SMD)	T <sub>J</sub> , T <sub>STG</sub>	-55~+175	°C

注 释: 轴向产品距离管体9.5mm引线处的温度, 设定为环境温度。贴片产品在引线末端安装5×5mm散热铜片。

Notes: Axial lead product tube 9.5 mm lead in body temperature, set to ambient temperature. SMD products installed in the end of the wire 5 x 5 mm cooling copper.

**产品外形尺寸:**
**PRODUCT APPEARANCE SIZE**


**电特性:**
**ELECTRICAL CHARACTERISTICS**

型号 TYPE	齐纳电压 Zener voltage		最大齐纳阻抗 Maximum dynamic resistance			最大反向漏电流 Maximum Leakage Current @VR		最大直流齐纳 电流Maximum DC zener current
	V Z@IZT	IZT	Z ZT @IZT	Z ZK @IZK	I ZK	IR@VR	VR	I ZM@50°C
	V	mA	Ω	Ω	mA	μA	V	mA
1N5333	3.3	380	3	400	1	300	1.0	1440
1N5334	3.6	350	2.5	500	1	150	1.0	1320
1N5335	3.9	320	2	500	1	50	1.0	1220
1N5336	4.3	290	2	500	1	10	1.0	1100
1N5337	4.7	260	2	450	1	5	1.0	1010
1N5338	5.1	240	1.5	400	1	1	1.0	930
1N5339	5.6	220	1	400	1	1	2.0	856
1N5340	6.0	200	1	300	1	1	3.0	790
1N5341	6.2	200	1	200	1	1	4.0	765
1N5342	6.8	175	1	200	1	10	4.9	700
1N5343	7.5	175	1.5	200	1	10	5.4	630
1N5344	8.2	150	1.5	200	1	10	5.9	580
1N5345	8.7	150	2	200	1	10	6.3	545
1N5346	9.1	150	2	150	1	7.5	6.6	520
1N5347	10	125	2	125	1	5	7.2	475
1N5348	11	125	2.5	125	1	5	8	430
1N5349	12	100	2.5	125	1	2	8.6	395
1N5350	13	100	2.5	100	1	1	9.4	365
1N5351	14	100	2.5	75	1	1	10.1	340
1N5352	15	75	2.5	75	1	1	10.8	315
1N5353	16	75	2.5	75	1	1	11.5	295
1N5354	17	70	2.5	75	1	0.5	12.2	280
1N5355	18	65	2.5	75	1	0.5	13	265
1N5356	19	65	3	75	1	0.5	13.7	250
1N5357	20	50	3	75	1	0.5	14.4	237
1N5358	22	50	3.5	75	1	0.5	15.8	216
1N5359	24	50	3.5	100	1	0.5	17.3	198
1N5360	25	50	4	110	1	0.5	18	190
1N5361	27	50	5	120	1	0.5	19.4	176
1N5362	28	50	6	130	1	0.5	20.1	170
1N5363	30	40	8	140	1	0.5	21.6	158
1N5364	33	40	10	150	1	0.5	23.8	144
1N5365	36	30	11	160	1	0.5	25.9	132
1N5366	39	30	14	170	1	0.5	28.1	122
1N5367	43	30	20	190	1	0.5	31	110
1N5368	47	25	25	210	1	0.5	33.8	100
1N5369	51	25	27	230	1	0.5	36.7	93
1N5370	56	20	35	280	1	0.5	40.3	86
1N5371	60	20	40	350	1	0.5	43	79
1N5372	62	20	42	400	1	0.5	44.6	76

**电特性:**
**ELECTRICAL CHARACTERISTICS**

型号 TYPE	齐纳电压 Zener voltage		最大齐纳阻抗 Maximum dynamic resistance			最大反向漏电流 Maximum Leakage Current @VR		最大直流齐纳 电流Maximum DC zener current
	V Z@IZT	IZT	Z ZT @IZT	Z ZK @IZK	I ZK	IR@VR	VR	I ZM@50°C
	V	mA	Ω	Ω	mA	μA	V	mA
1N5373	68	20	44	500	1	0.5	49	70
1N5374	75	20	45	620	1	0.5	54	63
1N5375	82	15	65	720	1	0.5	59	58
1N5376	87	15	75	760	1	0.5	63	54.5
1N5377	91	15	75	760	1	0.5	65.5	52.5
1N5378	100	12	90	800	1	0.5	72	47.5
1N5379	110	12	125	1000	1	0.5	79.2	43
1N5380	120	10	170	1150	1	0.5	86.4	39.5
1N5381	130	10	190	1250	1	0.5	93.2	36.6
1N5382	140	8	230	1500	1	0.5	101	34
1N5383	150	8	330	1500	1	0.5	108	31.6
1N5384	160	8	350	1650	1	0.5	115	29.4
1N5385	170	8	380	1750	1	0.5	122	28
1N5386	180	5	430	1750	1	0.5	130	26.4
1N5387	190	5	450	1850	1	0.5	137	25
1N5388	200	5	480	1850	1	0.5	144	23.6

注 释: 1. 标准型的齐纳电压值偏差为10%; 附加标"B"的特选型, 其偏差为5%。

Notes: The zener voltage value of the standard deviation is 10%; Additional standard "B", type selection, the deviation of 5%.

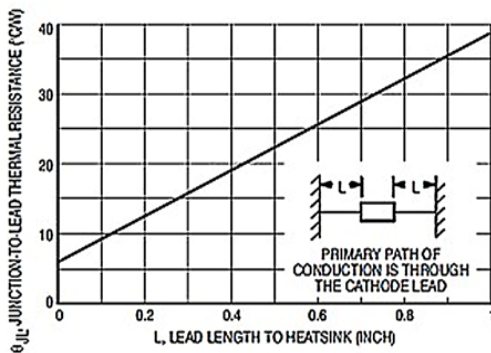
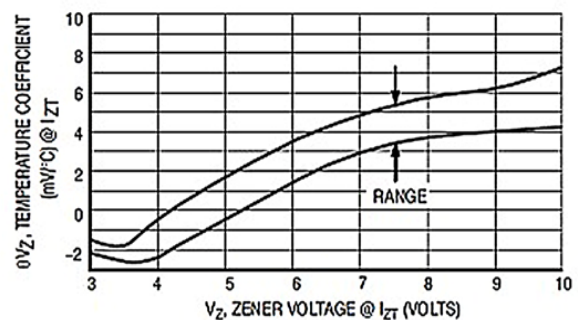
2. 表面贴装型将"1N"改为"1SMB"。 Surface-mount type "1N" to "1SMB".

3. 对于齐纳阻抗,  $I(ac\ rms) = 10\% I_{zt}$  The zener impedance,  $I_{zt}(ac\ RMS) = 10\%$

4. 对于齐纳拐点阻抗,  $I(ac\ rms) = 10\% I_{zk}$  The zener inflection point impedance,  $I_{zk}(ac\ RMS) = 10\%$

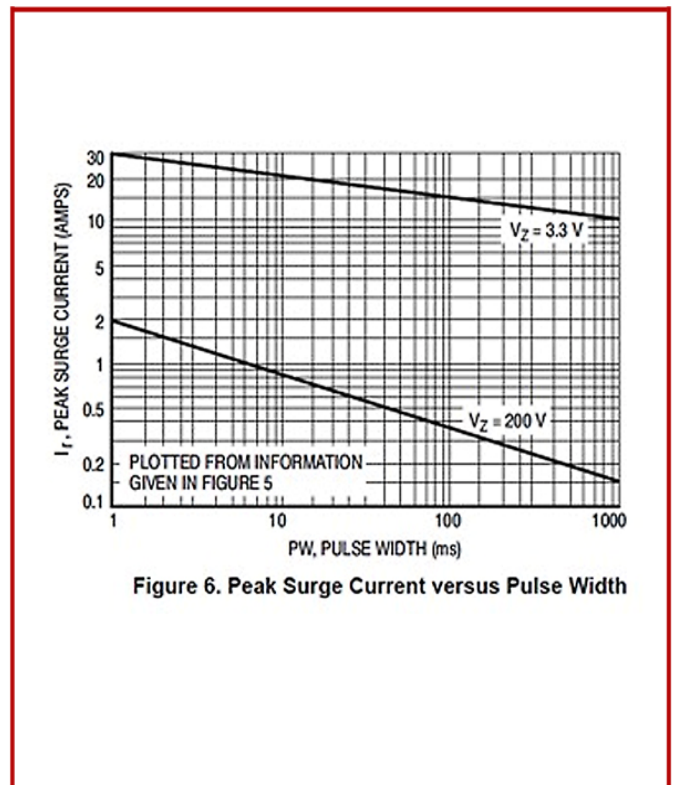
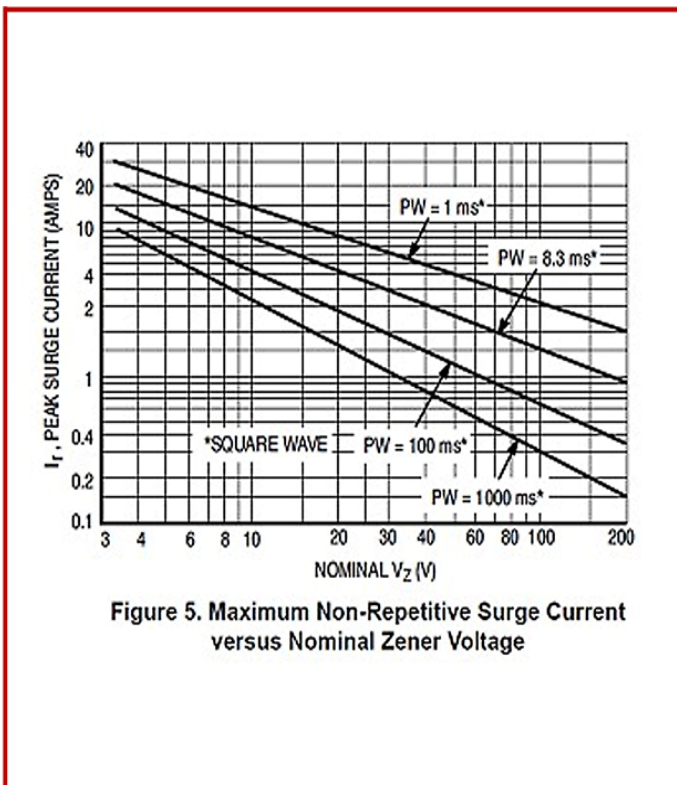
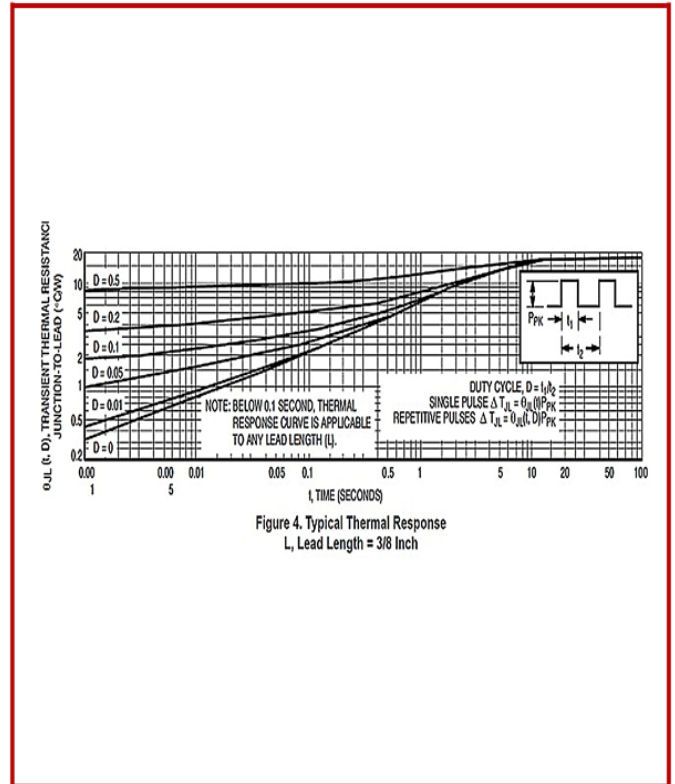
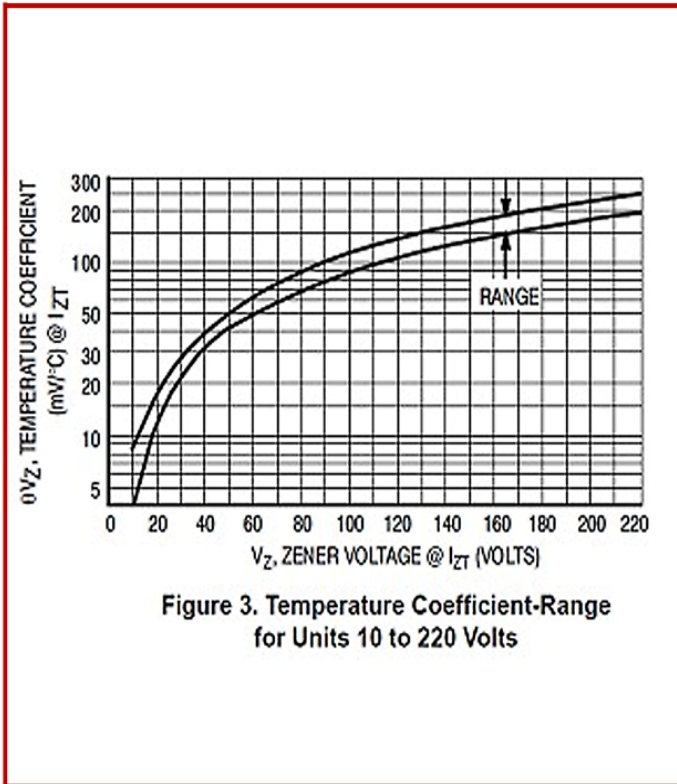
5. 这里的最大齐纳电流值并非绝对, 在实际稳态应用中, 应保证电压和电流的乘积不超过额定功率值。

Here is one of the most DaJi, current value is not absolute, in the practical application of the steady state, shall ensure that the product of the voltage and current shall not exceed the rated power value.

**特性曲线图:**
**RATINGS AND CHARACTERISTIC CURVES**
**1N5333B Series**

**Figure 1. Typical Thermal Resistance**

**Figure 2. Temperature Coefficient-Range for Units 3 to 10 Volts**

**特性曲线图:**

**RATINGS AND CHARACTERISTIC CURVES**



**特性曲线图:**

**RATINGS AND CHARACTERISTIC CURVES**

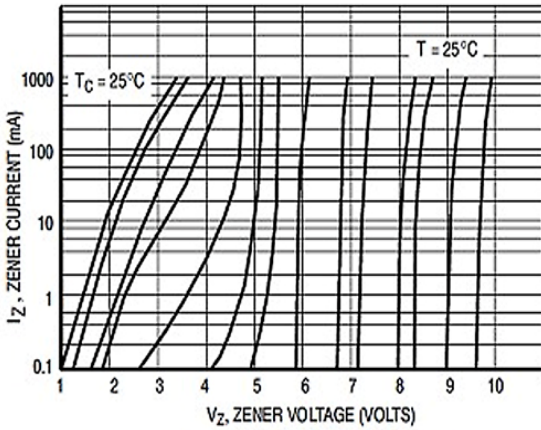


Figure 7. Zener Voltage versus Zener Current  
 $V_Z = 3.3$  thru 10 Volts

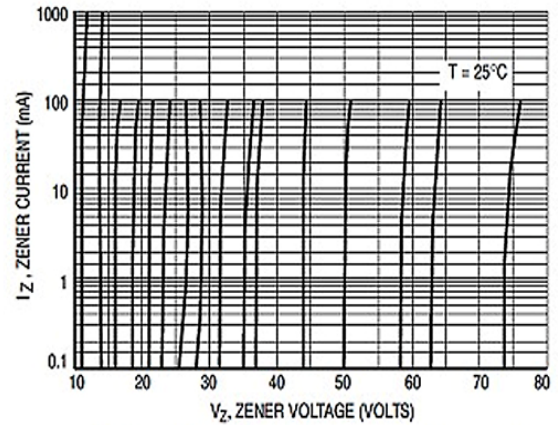


Figure 8. Zener Voltage versus Zener Current  
 $V_Z = 11$  thru 75 Volts

**1N5333B Series**

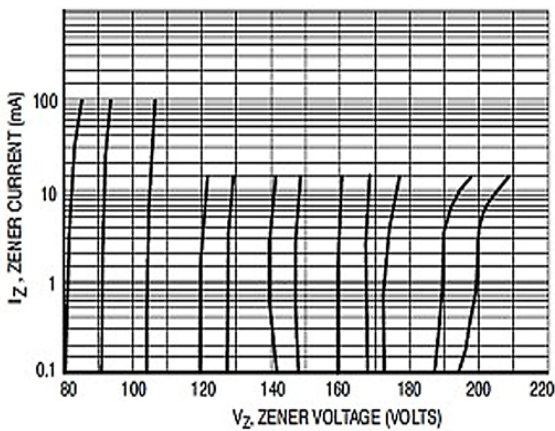


Figure 9. Zener Voltage versus Zener Current  
 $V_Z = 82$  thru 200 Volts