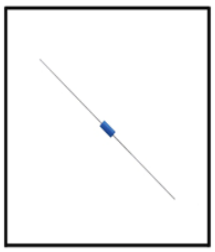
特性/机械性能： FEATURES/MECHANICAL DATE



DO-35

- ◆ 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：250℃/10S，引出端0.375”（9.5mm）处。
  Welding heat resistance: 250 ℃ / 10S, terminal 0.375 "(9.5 mm).
- ◆ 封 装：玻封 Case: Glass packaging
- ◆ 引 线：电镀可焊性符合MIL-STD-202E, 方法208C
  Lead: Axial lead solderable per MIL-STD-202, method 208 guaranteed
- ◆ 极 性：色环表示阴极 Polarity: Color band denotes cathode
- ◆ 安装位置：任意 Mounting position: Any

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

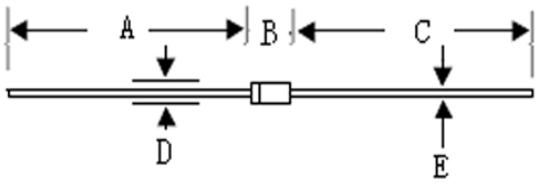
测量环境温度为25℃，除非另有规定。
Rating at 25℃ ambient temperature unless otherwise specified.

参数名称 Papt Number	符号Symbol	数值Value	单位Unit
齐纳电流 The zener current	IZ MAX	见表See table	mA
耗散功率@Ta=75℃ Power Dissipation@Ta=75℃	Pt	0.5	W
正向电压@IF=200mA Forward voltage@IF=200mA	V_F	1.5	V
热阻抗 Thermal impedance	$R_{\theta(ja)}$	32	℃/W
使用及储存温度范围 Operating and Storage Temperature Range	T_J,T_{STG}	-55～+175	℃

注 释：1. 距离管体9.5mm引线处的温度，设定为环境温度。
Notes: 1. The distance between the pipe body. The temperature of the 9.5 mm wire, set to ambient temperature.

产品外形尺寸： PRODUCT APPEARANCE SIZE

DO-35



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.0		25.4	
B		0.166		4.2
C	1.0		25.4	
D		0.079		2.0
E	0.018	0.022	0.46	0.56

飞仕龙达 FEISHILONGDA

ZENER 稳压二极管 Silicon Zener Diodes [1N52 Series]

电特性： ELECTRICAL CHARACTERISTICS

型 号 TYPE	齐纳电压 Zener voltage		最大齐纳阻抗 Maximuml dynamic resistance			最大反向漏 电 流 Maximuml Leakage Current @VR		
	V Z@IZT	IZT	Z ZT @IZT	Z ZK @IZK	I ZK	IR@VR	VR	
	V	mA	Ω	Ω	mA	μA	V	
1N5221B	2.4	20	30	1200	-0.085	100	1	
1N5222B	2.5	20	30	1250	-0.085	100	1	
1N5223B	2.7	20	30	1300	-0.080	75	1	
1N5224B	2.8	20	30	1400	-0.080	75	1	
1N5225B	3	20	29	1600	-0.075	50	1	
1N5226B	3.3	20	28	1600	-0.070	25	1	
1N5227B	3.6	20	24	1700	-0.065	15	1	
1N5228B	3.9	20	23	1900	-0.060	10	1	
1N5229B	4.3	20	22	2000	+0.055	5	1	
1N5230B	4.7	20	19	1900	+0.030	5	2	
1N5231B	5.1	20	17	1600	+0.030	5	2	
1N5232B	5.6	20	11	1600	+0.038	5	3	
1N5233B	6	20	7	1600	+0.038	5	3.5	
1N5234B	6.2	20	7	1000	+0.045	5	4	
1N5235B	6.8	20	5	750	+0.050	3	5	
1N5236B	7.5	20	6	500	+0.058	3	6	
1N5237B	8.2	20	8	500	+0.062	3	6.5	
1N5238B	8.7	20	8	600	+0.065	3	6.5	
1N5239B	9.1	20	10	600	+0.068	3	7	
1N5240B	10	20	17	600	+0.075	3	8	
1N5241B	11	20	22	600	+0.076	2	8.4	
1N5242B	12	20	30	600	+0.077	1	9.1	
1N5243B	13	9.5	13	600	+0.079	0.5	9.9	
1N5244B	14	9	15	600	+0.082	0.1	10	
1N5245B	15	8.5	16	600	+0.082	0.1	11	
1N5246B	16	7.8	17	600	+0.083	0.1	12	
1N5247B	17	7.4	19	600	+0.084	0.1	13	
1N5248B	**18**	**7**	**21**	**600**	**+0.085**	**0.1**	14	
1N5249B	**19**	**6.6**	**23**	**600**	**+0.086**	**0.1**	14	
1N5250B	20	6.2	25	600	+0.086	0.1	15	
1N5251B	22	5.6	29	600	+0.087	0.1	17	
1N5252B	24	5.2	33	600	+0.088	0.1	18	
1N5253B	25	5	35	600	+0.089	0.1	19	
1N5254B	27	4.6	41	600	+0.090	0.1	21	
1N5255B	28	4.5	44	600	+0.091	0.1	21	
1N5256B	30	4.2	49	600	+0.091	0.1	23	
1N5257B	33	3.8	58	700	+0.092	0.1	25	
1N5258B	36	3.4	70	700	+0.093	0.1	27	
1N5259B	39	3.2	80	800	+0.094	0.1	30	
1N5260B	43	3	93	900	+0.095	0.1	33	

电特性： ELECTRICAL CHARACTERISTICS

型 号 TYPE	齐纳电压 Zener voltage		最大齐纳阻抗 Maximuml dynamic resistance			最大反向漏 电 流 Maximuml Leakage Current @VR		
	V Z@IZT	IZT	Z ZT @IZT	Z ZK @IZK	I ZK	IR@VR	VR	
	V	mA	Ω	Ω	mA	μA	V	
1N5261B	47	2.7	105	1000	+0.095	0.1	36	
1N5262B	51	2.5	125	1100	+0.096	0.1	39	
1N5263B	56	2.2	150	1300	+0.096	0.1	43	
1N5264B	60	2.1	170	1400	+0.097	0.1	46	
1N5265B	62	2	185	1400	+0.097	0.1	47	
1N5266B	68	1.8	230	1600	+0.097	0.1	52	
1N5267B	75	1.7	270	1700	+0.098	0.1	56	
1N5268B	85	1.5	330	2000	+0.098	0.1	62	
1N5269B	87	1.4	370	2200	+0.099	0.1	68	
1N5270B	91	1.4	400	2300	+0.099	0.1	69	
1N5271B	100	1.3	500	2600	+0.099	0.1	76	
1N5272B	110	1.1	750	3000	+0.11	0.1	84	
1N5273B	120	1.0	900	4000	+0.11	0.1	91	
1N5274B	130	0.95	1100	4500	+0.11	0.1	99	
1N5275B	140	0.9	1300	4500	+0.11	0.1	106	
1N5276B	150	0.85	1500	5000	+0.11	0.1	114	
1N5277B	160	0.8	1700	5500	+0.11	0.1	122	
1N5278B	170	0.74	1900	5500	+0.11	0.1	129	
1N5279B	180	0.68	2300	6000	+0.11	0.1	137	

注释：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%。

Note: zener voltage value of the standard deviation is 10%; Selection of additional label "B", the deviation of 5%.

特性曲线图： RATINGS AND CHARACTERISTIC CURVES

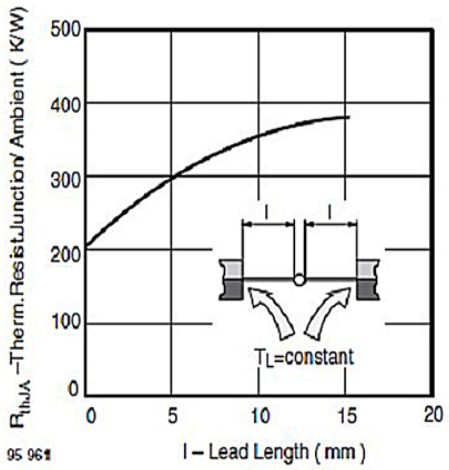


Figure 1. Thermal Resistance vs. Lead Length

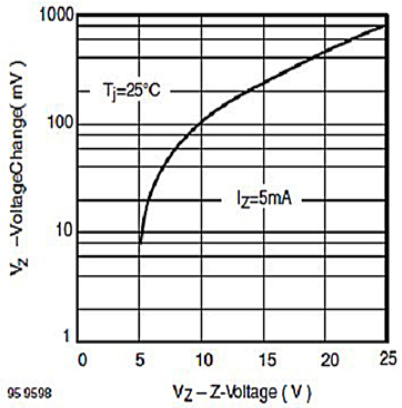


Figure 2. Typical Change of Working Voltage under Operating Conditions at T_{amb}=25°C

特性曲线图： RATINGS AND CHARACTERISTIC CURVES

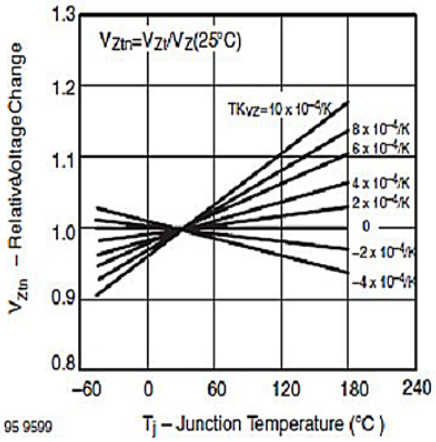


Figure 3. Typical Change of Working Voltage vs. Junction Temperature

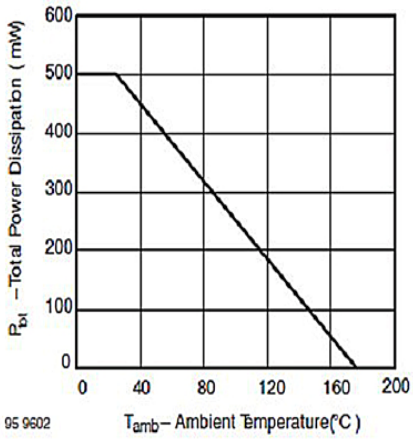


Figure 4. Total Power Dissipation vs. Ambient Temperature

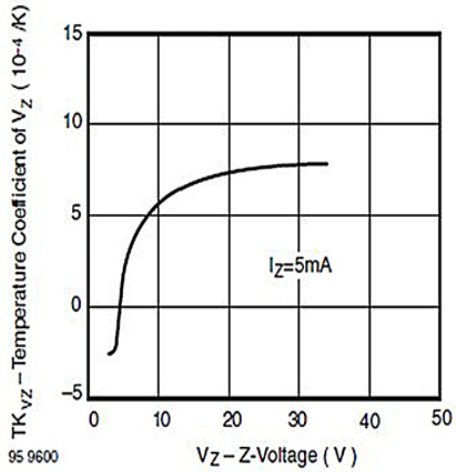


Figure 5. Temperature Coefficient of Vz vs. Z-Voltage

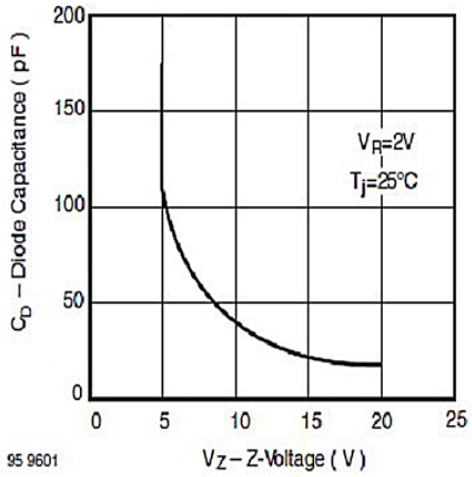


Figure 6. Diode Capacitance vs. Z-Voltage

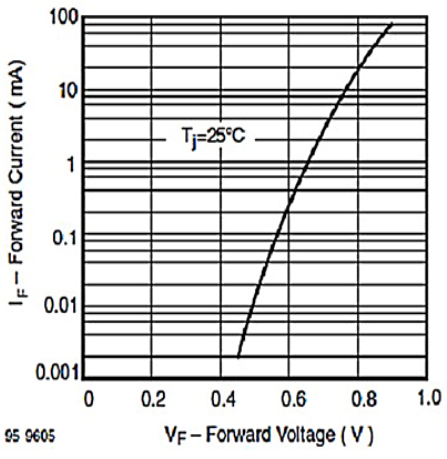


Figure 7. Forward Current vs. Forward Voltage

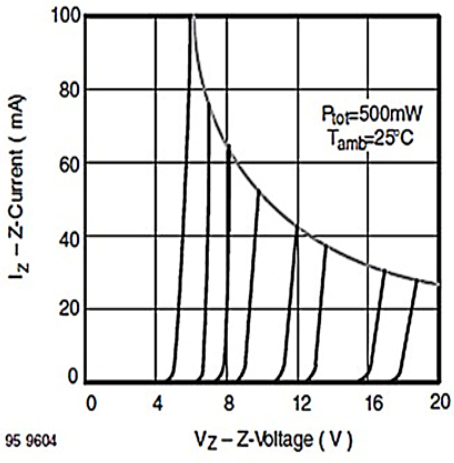


Figure 8. Z-Current vs. Z-Voltage

特性曲线图： RATINGS AND CHARACTERISTIC CURVES

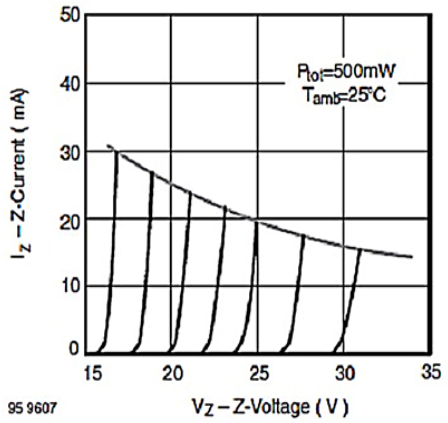


Figure 9. Z-Current vs. Z-Voltage

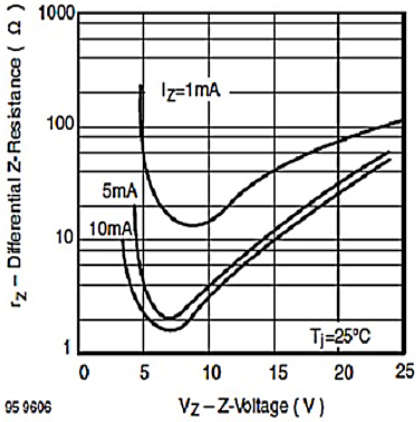


Figure 10. Differential Z-Resistance vs. Z-Voltage

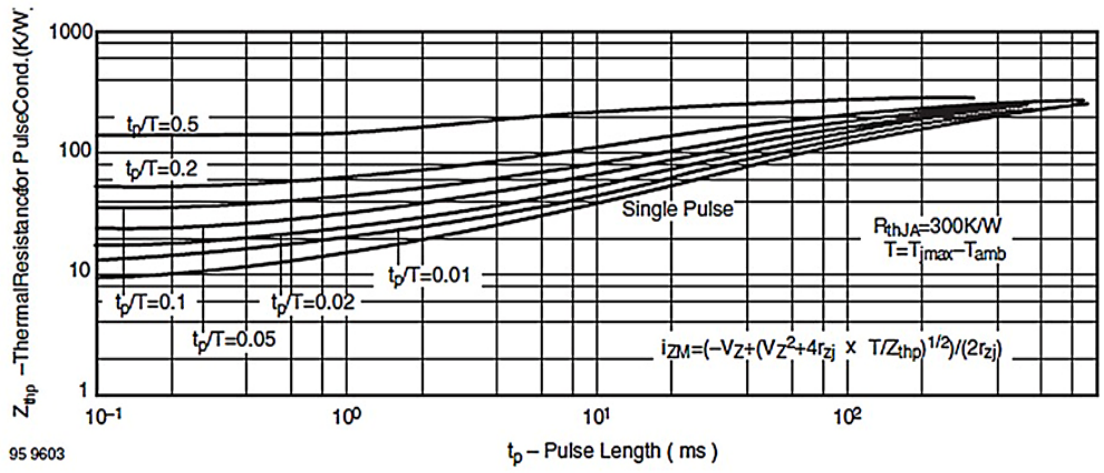


Figure 11. Thermal Response