



ZENER 稳压二极管 Silicon Zener Diodes

[ZY Series]

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。
Welding heat resistance: Axial product 250 °C / 10S, terminal 0.375 "(9.5 mm).
- ◆ 封 装: 模塑封装 Case: Molded plastic
- ◆ 引 线: 电镀可焊性符合MIL-STD-202E, 方法208C
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



DO-41

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.

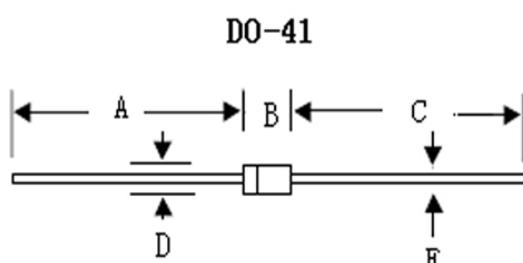
参数名称 Part Number	符号Symbol	数值Value	单位Unit
齐纳电流 The zener current	I _Z MAX	见表See table	mA
耗散功率@Ta=25°C Power Dissipation@Ta=25°C	P _T	2.0	W
正向电压@IF=1A/IF=2.5A Forward voltage@IF=1A/IF=2.5A	V _F	1.0/1.15	V
热阻抗 Thermal impedance	R _{θ (ja)}	32	°C/W
使用及储存温度范围 Operating and Storage Temperature Range	T _{J,TSTG}	-55~+150	°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。

Notes: Axial lead product tube 9.5 mm lead in body temperature, set to ambient temperature.

产品外形尺寸:

PRODUCT APPEARANCE SIZE



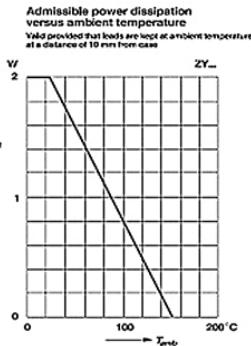
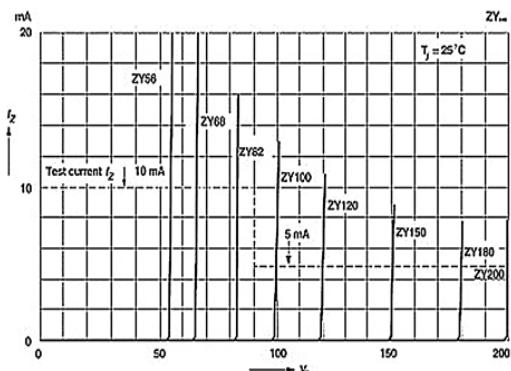
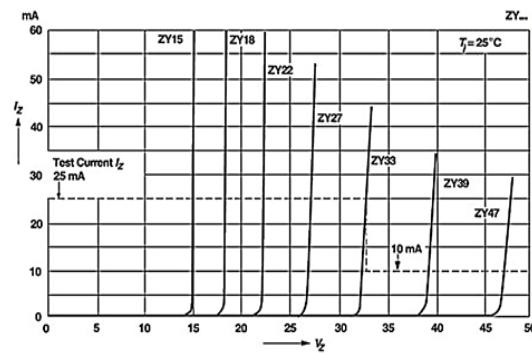
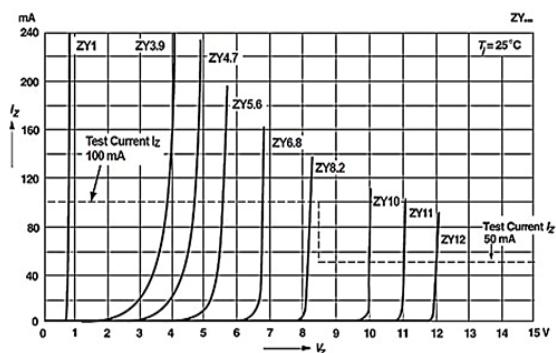
DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.0		25.4	
B	0.161	0.205	4.1	5.2
C	1.0		25.4	
D	0.080	0.107	2.0	2.7
E	0.028	0.034	0.71	0.86

ELECTRICAL CHARACTERISTICS
电特性:

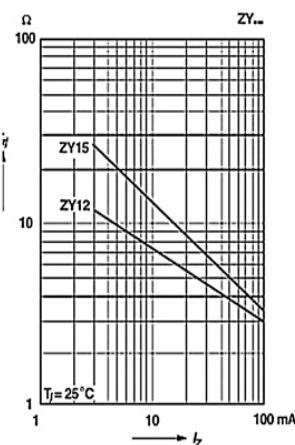
型 号 TYPE	齐纳电压 Zener voltage		测试电流 Test current	齐纳阻抗 Dynamic resistance	温度系数 Temperature coefficient		反向电压 Reverse voltage@ IR≤10μA	最大直流齐纳 电流Mzimum DC zener current
	Vz min	Vz max			IZT	αVZ min @IZT	αVZ max @IZT	
	V	V	mA	Ω	10 ⁻⁴ /°C	10 ⁻⁴ /°C	V	mA
ZY6.8	6.4	7.2	100	2	0	7	2	220
ZY7.5	7	7.9	100	2	0	7	2	200
ZY8.2	7.7	8.7	100	2	3	8	3.5	180
ZY9.1	8.5	9.6	50	4	3	8	7.4	165
ZY10	9.4	10.6	50	4	5	9	8.2	145
ZY11	10.6	11.6	50	7	5	10	9.2	135
ZY12	11.6	12.7	50	7	5	10	10	120
ZY13	12.4	14.1	50	10	5	10	10.7	110
ZY15	13.8	15.6	50	10	5	10	12	98
ZY16	15.3	17.1	25	15	6	11	13.3	90
ZY18	16.8	19.1	25	15	6	11	14.7	80
ZY20	18.8	21.2	25	15	6	11	16.5	72
ZY22	20.8	23.3	25	15	6	11	18.3	66
ZY24	22.8	25.6	25	15	6	11	20.1	60
ZY27	25.1	28.9	25	15	6	11	22.5	53
ZY30	28	32	25	15	6	11	25.1	48
ZY33	31	35	25	15	6	11	27.8	44
ZY36	34	38	10	40	6	11	30.2	40
ZY39	37	41	10	40	6	11	32.9	37
ZY43	40	46	10	45	7	12	35.6	33
ZY47	44	50	10	45	7	12	39.2	30
ZY51	48	54	10	60	7	12	42.8	27
ZY56	52	60	10	60	7	12	47.3	25
ZY62	58	66	10	80	8	13	51.3	21
ZY68	64	72	10	80	8	13	57.1	20
ZY75	70	79	10	100	8	13	63.2	18
ZY82	77	88	10	100	8	13	68.6	16
ZY91	85	96	5	200	9	13	75.6	15
ZY100	94	106	5	200	9	13	83.7	13
ZY110	104	116	5	250	9	13	93.8	12
ZY120	114	127	5	250	9	13	101.6	11
ZY130	124	141	5	300	9	13	110.5	10
ZY150	138	156	5	300	9	13	123	9
ZY160	153	171	5	350	9	13	136	8.5
ZY180	168	191	5	350	9	13	149	8
ZY 200	188	212	5	350	9	13	167	7.5

特性曲线图：
RATINGS AND CHARACTERISTIC CURVES

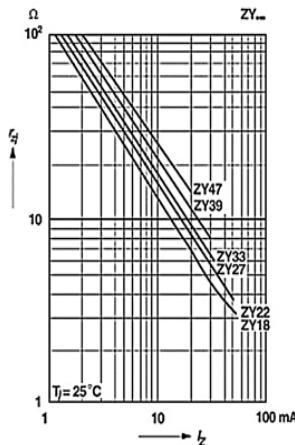
$T_1 = \text{constant (pulsed)}$



Dynamic resistance
versus Zener current

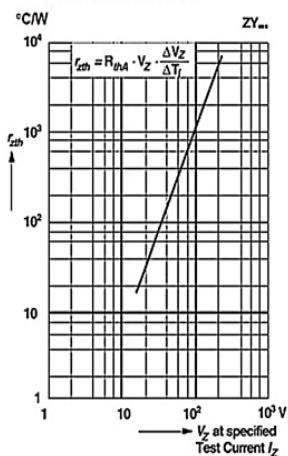


Dynamic resistance
versus Zener current

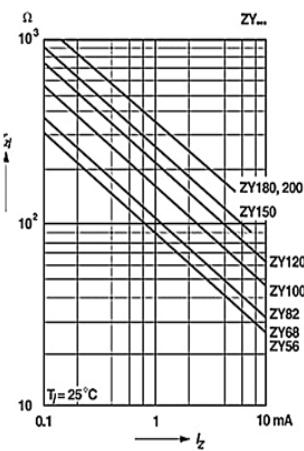


Dynamic resistance
versus Zener current

Thermal differential resistance
versus Zener voltage
Valid provided that leads are kept at ambient temperature
at a distance of 10 mm from case



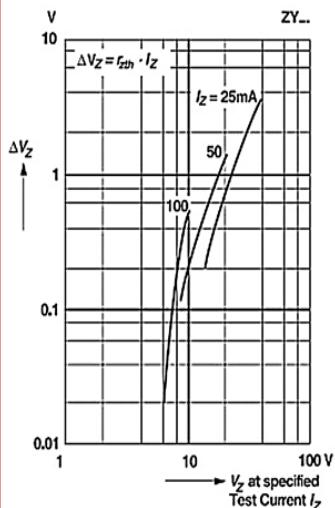
Dynamic resistance
versus Zener current



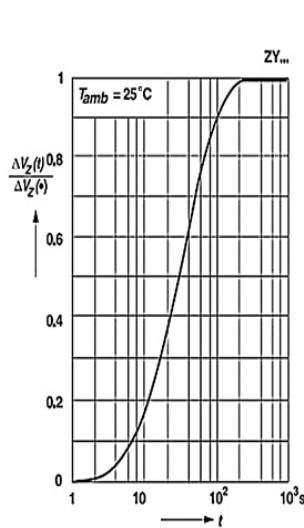
Change of Zener voltage from turn-on
up to the point of thermal equilibrium
versus Zener Voltage

[2EZ Series]
特性曲线图:
RATINGS AND CHARACTERISTIC CURVES
ZENER

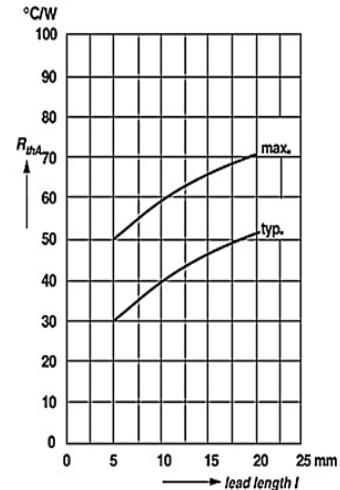
Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener Voltage



Relative change of Zener voltage versus turn-on time

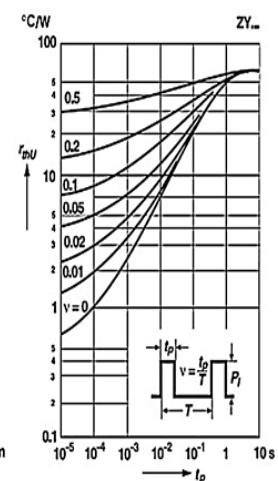


Thermal resistance versus lead length

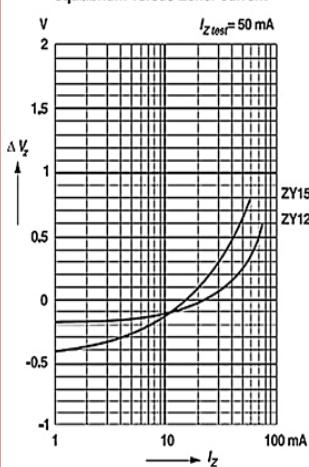


Pulse thermal resistance versus pulse duration

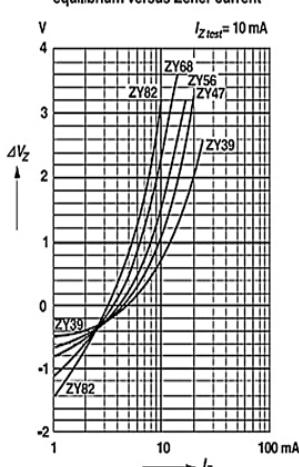
Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case



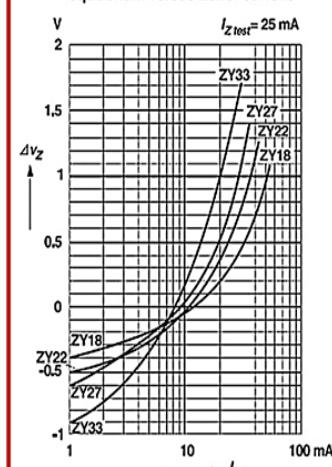
Difference between Zener voltage at test current pulses less than 1 s duration and Zener voltage at the point of thermal equilibrium versus Zener current



Difference between Zener voltage at test current pulses less than 1 s duration and Zener voltage at the point of thermal equilibrium versus Zener current



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