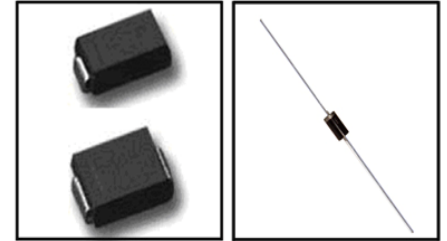


特性/机械性能:
FEATURES/MECHANICAL DATE

- ◆ 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。

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

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



SMA/SMB

DO-41

- ◆ 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

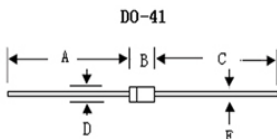
测量环境温度为25°C, 除非另有规定。

Rating at 25°C ambient temperature unless otherwise specified.

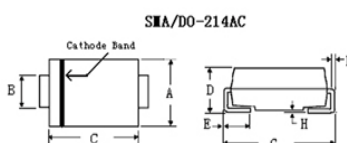
参数名称 Papt Number	符号Symbol	数值Value	单位Unit
齐纳电流 The zener current	I _Z MAX	见表See table	mA
耗散功率@Ta=75°C Power Dissipation@Ta=75°C	P _t	1.5	W
正向电压@IF=200mA Forward voltage@IF=200mA	V _F	1.5	V
热阻抗 Thermal impedance	R _θ (ja)	28	°C/W
使用及储存温度范围(贴片) Operating and Storage Temperature Range (Axial)	T _J , T _{STG}	-55~+150	°C
使用及储存温度范围(轴向) Operating and Storage Temperature Range (SMD)	T _J , T _{STG}	-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。

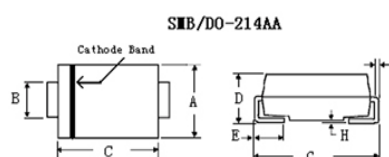
Notes: Axial lead product tube 9.5 mm lead in body temperature, set to ambient temperature. SMD products installed in the end of the wire 5 x 5 mm cooling copper.

产品外形尺寸:
PRODUCT APPEARANCE SIZE


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



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.096	0.108	2.45	2.75
B	0.049	0.061	1.25	1.55
C	0.171	0.183	4.35	4.65
D	0.075	0.091	1.90	2.30
E	0.031	0.055	0.80	1.40
F	0.005	0.011	0.13	0.27
G	0.191	0.203	4.85	5.15
H		0.008		0.203



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.132	0.144	3.35	3.65
B	0.073	0.085	1.85	2.15
C	0.167	0.179	4.25	4.55
D	0.083	0.098	2.10	2.50
E	0.031	0.055	0.80	1.40
F	0.006	0.011	0.15	0.29
G	0.199	0.211	5.05	5.35
H		0.008		0.203

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 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
1N5913	3.3	113.6	10	500	1.0	100	1.0	454
1N5914	3.6	104.2	9.0	500	1.0	75	1.0	416
1N5915	3.9	96.1	7.5	500	1.0	25	1.0	384
1N5916	4.3	87.2	6.0	500	1.0	5.0	1.0	348
1N5917	4.7	79.8	5.0	500	1.0	5.0	1.5	319
1N5918	5.1	73.5	4.0	500	1.0	5.0	2.0	294
1N5919	5.6	66.9	2.0	500	1.0	5.0	3.0	267
1N5920	6.2	60.5	2.0	200	1.0	5.0	4.0	241
1N5921	6.8	55.1	2.5	200	1.0	50	5.2	220
1N5922	7.5	50.0	3.0	400	0.5	50	6.0	200
1N5923	8.2	45.7	3.5	400	0.5	50	6.5	182
1N5924	9.1	41.2	4.0	500	0.5	50	7.0	164
1N5925	10	37.5	4.5	500	0.25	50	8.0	150
1N5926	11	34.1	5.5	550	0.25	50	8.4	136
1N5927	12	31.2	6.5	550	0.25	1.0	9.1	125
1N5928	13	28.8	7.0	550	0.25	1.0	9.9	115
1N5929	15	25.0	9.0	600	0.25	1.0	11.4	100
1N5930	16	23.4	10	600	0.25	1.0	12.2	93
1N5931	18	20.8	12	650	0.25	1.0	13.7	83
1N5932	20	18.7	14	650	0.25	1.0	15.2	75
1N5933	22	17.0	17.5	650	0.25	1.0	16.7	68
1N5934	24	15.6	19	700	0.25	1.0	18.2	62
1N5935	27	13.9	23	700	0.25	1.0	20.6	55
1N5936	30	12.5	26	750	0.25	1.0	22.8	50
1N5937	33	11.4	33	800	0.25	1.0	25.1	45
1N5938	36	10.4	38	850	0.25	1.0	27.4	41
1N5939	39	9.6	45	900	0.25	1.0	29.7	38
1N5940	43	8.7	53	950	0.25	1.0	32.7	34
1N5941	47	8.0	67	1000	0.25	1.0	35.8	31
1N5942	51	7.3	70	1100	0.25	1.0	38.8	29
1N5943	56	6.7	86	1300	0.25	1.0	42.6	26
1N5944	62	6.0	100	1500	0.25	1.0	47.1	24
1N5945	68	5.5	120	1700	0.25	1.0	51.7	22
1N5946	75	5.0	140	2000	0.25	1.0	56.0	20
1N5947	82	4.6	160	2500	0.25	1.0	62.2	18
1N5948	91	4.1	200	3000	0.25	1.0	69.2	16
1N5949	100	3.7	250	3100	0.25	1.0	76.0	15
1N5950	110	3.4	300	4000	0.25	1.0	83.6	13
1N5951	120	3.1	380	4500	0.25	1.0	91.2	12

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
1N5952	130	2.9	450	5000	0.25	1.0	98.8	11
1N5953	150	2.5	600	6000	0.25	1.0	114.0	10
1N5954	160	2.3	700	6500	0.25	1.0	121.6	9.0
1N5955	180	2.1	900	7000	0.25	1.0	136.8	8.0
1N5956	200	1.9	1200	8000	0.25	1.0	152.0	7.0
1N5957	240	1.5	1600	9000	0.25	1.0	182.4	6.0

注释:Notes:

- 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%。
 - 表面贴装型将“1N”改为“1SMA”或“1SMB”。
 - 对于齐纳阻抗， $I(ac\ rms) = 10\% I_{zt}$
 - 对于齐纳拐点阻抗， $I(ac\ rms) = 10\% I_{zk}$
 - 这里的最大齐纳电流值并非是绝对的，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。
- The zener voltage value of the standard deviation is 10%; Additional standard "B", type selection, the deviation of 5%.
 - Surface-mount type "1N" to "1SMA" or "1SMB".
 - The zener impedance, $I_{zt} (ac\ RMS) = 10\%$.
 - The zener inflection point impedance, $I_{zk} (ac\ RMS) = 10\%$.
 - 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.

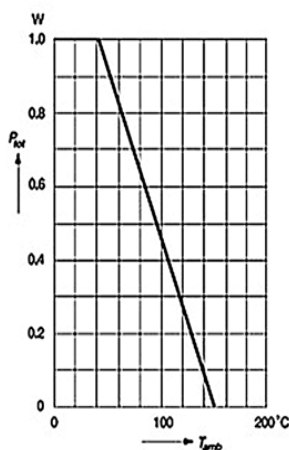
特性曲线图:
RATINGS AND CHARACTERISTIC CURVES


Figure1.Power Temperature Derating Curve

特性曲线图:

RATINGS AND CHARACTERISTIC CURVES

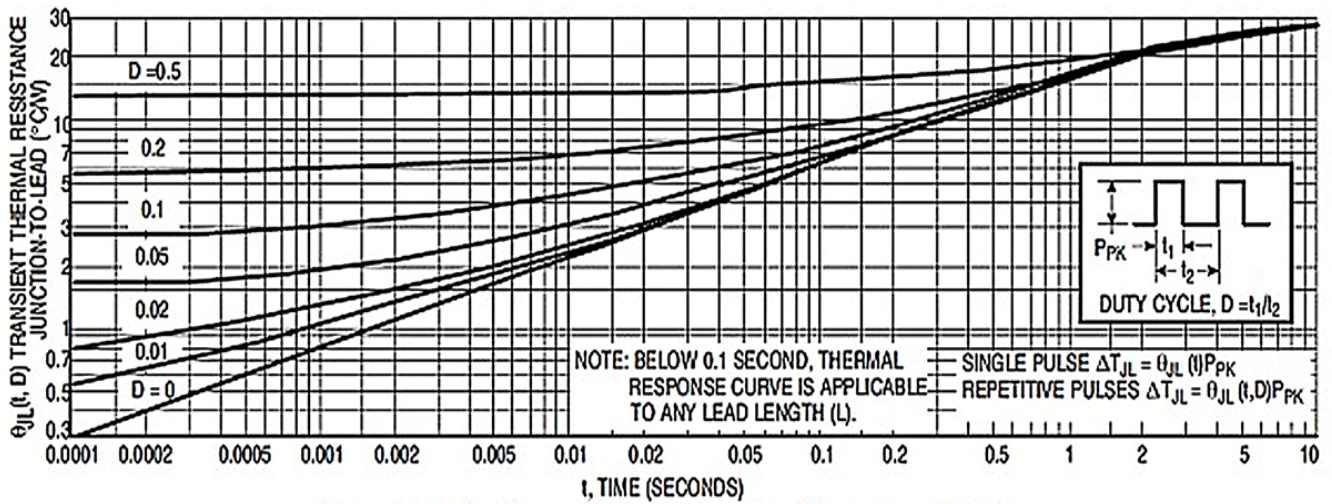


Figure 2. Typical Thermal Response L, Lead Length = 3/8 Inch

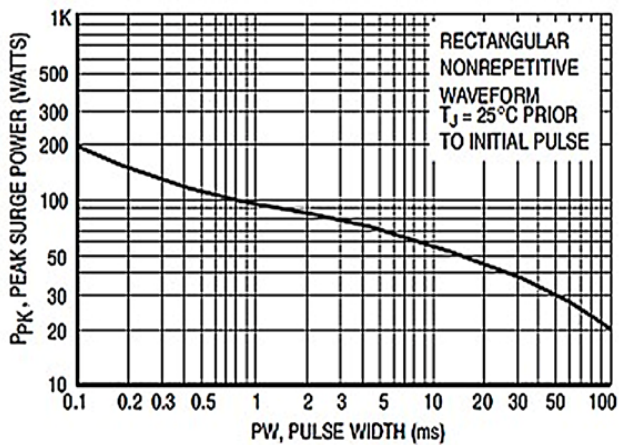


Figure 3. Maximum Surge Power

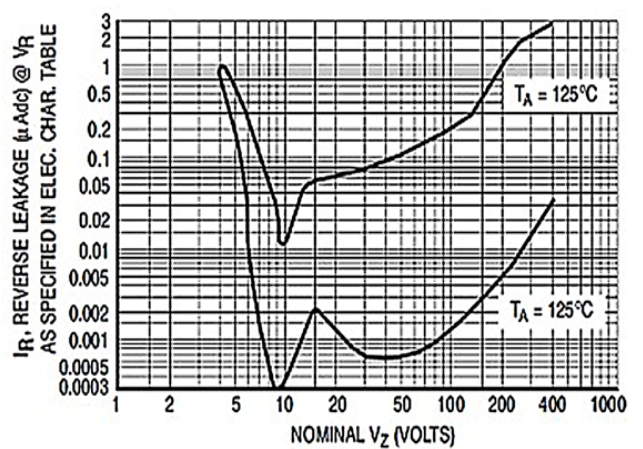


Figure 4. Typical Reverse Leakage