



稳压（齐纳）二极管 Zener Diodes

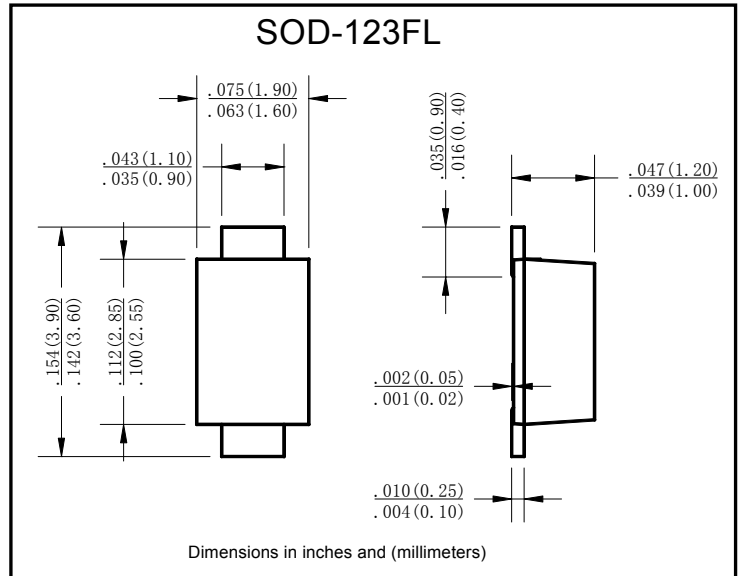
■特征 Features

- P_{tot} 1.0W
- V_z 3.3V-100V

■用途 Applications

- 稳定电压用 Stabilizing Voltage

■外形尺寸和印记 Outline Dimensions and Mark



■极限值（绝对最大额定值）

Limiting Values (Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	最大值 Max
损耗功率 Power dissipation	P_{tot}	W	$T_L=75^\circ\text{C}$	1.0
齐纳电流 Zener current	I_z	mA		P_v / V_z
最大结温 Maximum junction temperature	T_j	$^\circ\text{C}$		150
存储温度范围 Storage temperature range	T_{stg}	$^\circ\text{C}$		-65 to +150

■电特性（ $T_a=25^\circ\text{C}$ 除非另有规定）Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	最大值 Max
典型热阻 Thermal resistance	$R_{\theta JL}$	$^\circ\text{C}/\text{W}$	结和引线之间 Between junction and lead	26
正向电压 Forward voltage	V_F	V	$I_F=200\text{mA}$	1.2

■ 电性参数 (T_A=25℃ 除非另有规定)

Electrical Characteristics (T_A=25℃ unless otherwise noted)

产品型号 Part Number	印字代码 Marking Code	额定齐纳电压	测试电流	最大动态阻抗			最大反向漏电流		最大浪涌电流
		Nominal Zener voltage	Test current	Maximum dynamic impedance resistance			Maximum reverse leakage current		Max Surge current
		V _Z ⁽¹⁾ at I _{ZT}	I _{ZT}	Z _{ZT} at I _{ZT}	Z _{ZK} at I _{ZK}	I _{ZK}	IR	Test voltage V _R	I _{RM} ⁽²⁾
		V	mA	Ω	Ω	mA	μA	V	mA
SMF4728	4728	3.3	76	10	400	1	100	1.0	1380
SMF4729	4729	3.6	69	10	400	1	100	1.0	1260
SMF4730	4730	3.9	64	9	400	1	50	1.0	1190
SMF4731	4731	4.3	58	9	400	1	10	1.0	1070
SMF4732	4732	4.7	53	8	500	1	10	1.0	970
SMF4733	4733	5.1	49	7	550	1	10	1.0	890
SMF4734	4734	5.6	45	5	600	1	10	2.0	810
SMF4735	4735	6.2	41	2	700	1	10	3.0	730
SMF4736	4736	6.8	37	3.5	700	1	10	4.0	660
SMF4737	4737	7.5	34	4	700	0.5	10	5.0	605
SMF4738	4738	8.2	31	4.5	700	0.5	10	6.0	550
SMF4739	4739	9.1	28	5	700	0.5	10	7.0	500
SMF4740	4740	10	25	7	700	0.25	10	7.6	454
SMF4741	4741	11	23	8	700	0.25	5	8.4	414
SMF4742	4742	12	21	9	700	0.25	5	9.1	380
SMF4743	4743	13	19	10	700	0.25	5	9.9	344
SMF4744	4744	15	17	14	700	0.25	5	11.4	304
SMF4745	4745	16	15.5	16	700	0.25	5	12.2	285
SMF4746	4746	18	14	20	750	0.25	5	13.7	250
SMF4747	4747	20	12.5	22	750	0.25	5	15.2	225
SMF4748	4748	22	11.5	23	750	0.25	5	16.7	205
SMF4749	4749	24	10.5	25	750	0.25	5	18.2	190
SMF4750	4750	27	9.5	35	750	0.25	5	20.6	170
SMF4751	4751	30	8.5	40	1000	0.25	5	22.8	150
SMF4752	4752	33	7.5	45	1000	0.25	5	25.1	135
SMF4753	4753	36	7	50	1000	0.25	5	27.4	125
SMF4754	4754	39	6.5	60	1000	0.25	5	29.7	115
SMF4755	4755	43	6	70	1500	0.25	5	32.7	110
SMF4756	4756	47	5.5	80	1500	0.25	5	35.8	95
SMF4757	4757	51	5	95	1500	0.25	5	38.8	90
SMF4758	4758	56	4.5	110	2000	0.25	5	42.6	80
SMF4759	4759	62	4	125	2000	0.25	5	47.1	70
SMF4760	4760	68	3.7	150	2000	0.25	5	51.7	65
SMF4761	4761	75	3.3	175	2000	0.25	5	56.0	60
SMF4762	4762	82	3.0	200	3000	0.25	5	62.2	55
SMF4763	4763	91	2.8	250	3000	0.25	5	69.2	50
SMF4764	4764	100	2.5	350	3000	0.25	5	76.0	45

备注: Notes:

(1) 基于直流测试热平衡状态

Based on dc-measurement at thermal equilibrium

(2) 浪涌电流是不重复的, 为8.3毫秒脉宽方形或等效正弦波叠加在I_{ZT}的每种JEDEC方法

Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method



■特性曲线（典型） Characteristics(Typical)

图1: 最大连续功率损耗

FIG1: Maximum Continuous Power Dissipation

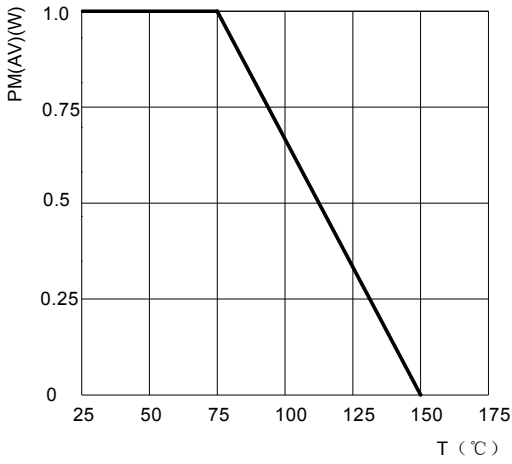


图2: 典型齐纳阻抗

FIG2: Typical Zener Impedance

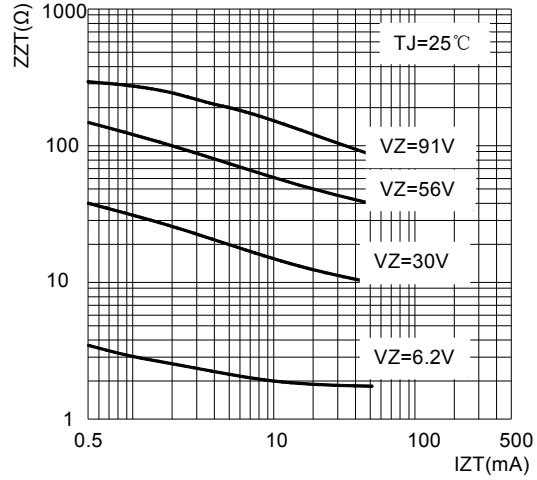


图3: 典型温度系数

FIG3: Typical Temperature Coefficients

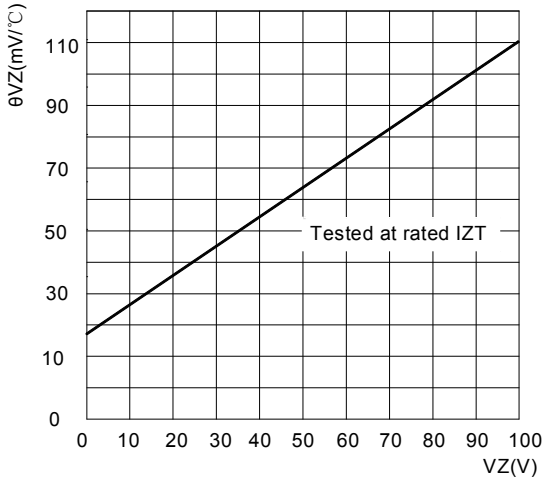


图4: SMA4763A 的典型瞬态正向特性

FIG4: Typical Instantaneous Forward Characteristics for SMA4763A

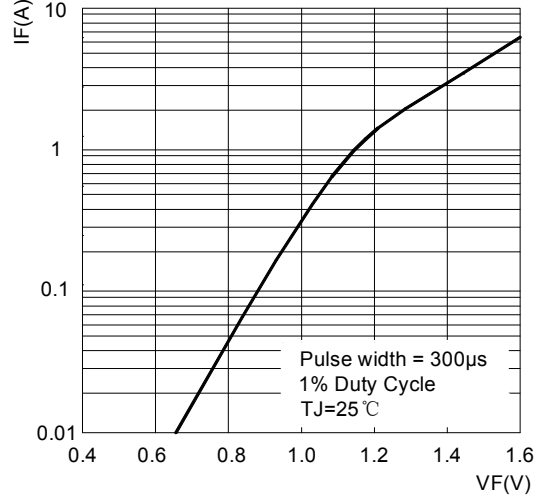


图5: 典型反向特性

FIG5: Typical Reverse Characteristics

