

描述 / Descriptions

稳压二极管，薄型 SMAF 封装。
Silicon Planar Zener Diodes, SMAF thin package.

特征 / Features

适用于 3.3V 至 330V 的宽范围稳压电路，小型塑料封装适合表面贴装工艺。无卤产品。
3.3V to 330V wide zener voltage range applications, Small plastic package suitable for surface mounted design. Halogen free product.

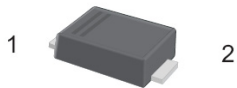
用途 / Applications

1W 功耗，自动贴片组装。
1W power dissipation, automated assembly processes.

内部等效电路 / Equivalent Circuit

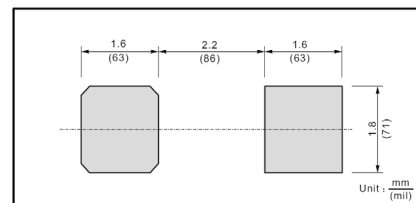


引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Power Dissipation at $T_L=75^\circ\text{C}$	P_D	1.0	W
Forward Voltage at $I_F = 200 \text{ mA}$	V_F	1.2	V
Junction Temperature Range	T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55~150	$^\circ\text{C}$

电性能参数 / Electrical Characteristics(Ta=25°C)

Type	Marking	Zener Voltage Range ⁽¹⁾			I_{ZT} mA	Dynamic Impedance	Reverse Current		Admissible Zener Current I_{ZM} (mA)
		V_{ZT} (at I_{ZT})				Z_{ZT} (at I_{ZT})	I_R	at V_R	
		Min (V)	Nom (V)	Max (V)		Max (Ω)	Max (μA)	(V)	
1SMAF4728A	728A	3.10	3.3	3.5	75	10	100	1	285
1SMAF4729A	729A	3.40	3.6	3.8	69	10	100	1	263
1SMAF4730A	730A	3.70	3.9	4.10	64	9.0	50	1	243
1SMAF4731A	731A	4.06	4.3	4.56	58	9.0	25	1	219
1SMAF4732A	732A	4.50	4.7	4.96	53	8.0	10	1	203
1SMAF4733A	733A	4.84	5.1	5.36	49	7.0	10	1	186
1SMAF4734A	734A	5.32	5.6	5.92	45	5.0	10	2	170
1SMAF4735A	735A	5.86	6.2	6.51	41	2.0	10	3	154
1SMAF4736A	736A	6.46	6.8	7.18	37	3.5	10	4	140
1SMAF4737A	737A	7.12	7.5	7.88	34	4.0	10	5	127
1SMAF4738A	738A	7.79	8.2	8.67	31	4.5	10	6	116
1SMAF4739A	739A	8.60	9.1	9.59	28	5.0	10	7	104
1SMAF4740A	740A	9.50	10	10.5	25	7.0	10	7	95
1SMAF4741A	741A	10.4	11	11.6	23	8.0	5	8	86
1SMAF4742A	742A	11.4	12	12.6	21	9.0	5	9	79
1SMAF4743A	743A	12.4	13	14.1	19	10	5	10	71

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电性能参数 / Electrical Characteristics(Ta=25°C)

Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT} mA	Dynamic Impedance Z _{ZT} (at I _{ZT}) Max (Ω)	Reverse Current		Admissible Zener Current I _{ZM} (mA)
		V _{ZT} (at I _{ZT})					I _R	at V _R	
		Min (V)	Nom (V)	Max (V)			Max (μA)	(V)	
1SMAF4744A	744A	13.8	15	15.8	17	14	5	11	63
1SMAF4745A	745A	15.2	16	17.1	16	16	5	12	58
1SMAF4746A	746A	16.8	18	19.2	14	20	5	13	52
1SMAF4747A	747A	19.0	20	21.2	13	22	5	15	47
1SMAF4748A	748A	20.8	22	23.3	12	23	5	17	43
1SMAF4749A	749A	22.8	24	26.0	11	25	5	18	38
1SMAF4750A	750A	25.3	27	28.9	9.5	35	5	21	35
1SMAF4751A	751A	28.2	30	32.0	8.5	40	5	23	31
1SMAF4752A	752A	31.3	33	34.9	7.5	45	5	25	28
1SMAF4753A	753A	34.2	36	37.9	7.0	50	5	27	26
1SMAF4754A	754A	37.2	39	41.5	6.5	60	5	30	24
1SMAF4755A	755A	40.9	43	45.6	6.0	70	1	32	22
1SMAF4756A	756A	44.9	47	49.8	5.5	80	1	35	20
1SMAF4757A	757A	48.6	51	54.0	5.0	95	1	38	18
1SMAF4758A	758A	53.6	56	58.8	4.5	110	1	42	17
1SMAF4759A	759A	58.9	62	65.6	4.0	125	1	47	15
1SMAF4760A	760A	64.6	68	71.7	3.7	150	1	52	14
1SMAF4761A	761A	71.2	75	78.8	3.3	175	1	56	12
1SMAF4762A	762A	77.9	82	87.0	3.0	200	1	62	11
1SMAF4763A	763A	86.0	91	96.0	2.8	250	1	69	10
1SMAF4764A	764A	95.0	100	105	2.5	350	1	76	9.5
1SMAF4765A	765A	104	110	116	2.3	450	1	84	8.6
1SMAF4766A	766A	114	120	127	2.0	550	1	91	7.8
1SMAF4767A	767A	125	135	142	1.9	700	1	100	7.0

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电性能参数 / Electrical Characteristics(Ta=25°C)

Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT} mA	Dynamic Impedance Z _{ZT} (at I _{ZT}) Max (Ω)	Reverse Current		Admissible Zener Current I _{ZM} (mA)
		V _{ZT} (at I _{ZT})					I _R	at V _R	
		Min (V)	Min (V)	Min (V)			Max (μA)	(V)	
1SMAF4768A	768A	140	150	157	1.7	900	1	110	6.3
1SMAF4769A	769A	155	165	172	1.6	1100	1	120	5.8
1SMAF4770A	770A	170	180	191	1.4	1200	1	135	5.2
1SMAF4771A	771A	189	200	211	1.2	1400	1	150	4.7
1SMAF4772A	772A	209	220	231	1.0	1600	1	165	4.3
1SMAF4773A	773A	229	240	251	1.0	1800	1	180	3.9
1SMAF4774A	774A	249	260	271	1.0	2000	1	190	3.7
1SMAF4775A	775A	269	280	291	1.0	2100	1	205	3.4
1SMAF4776A	776A	289	300	315	1.0	2300	1	230	3.1
1SMAF4777A	777A	313	330	346	1.0	2500	1	250	2.8

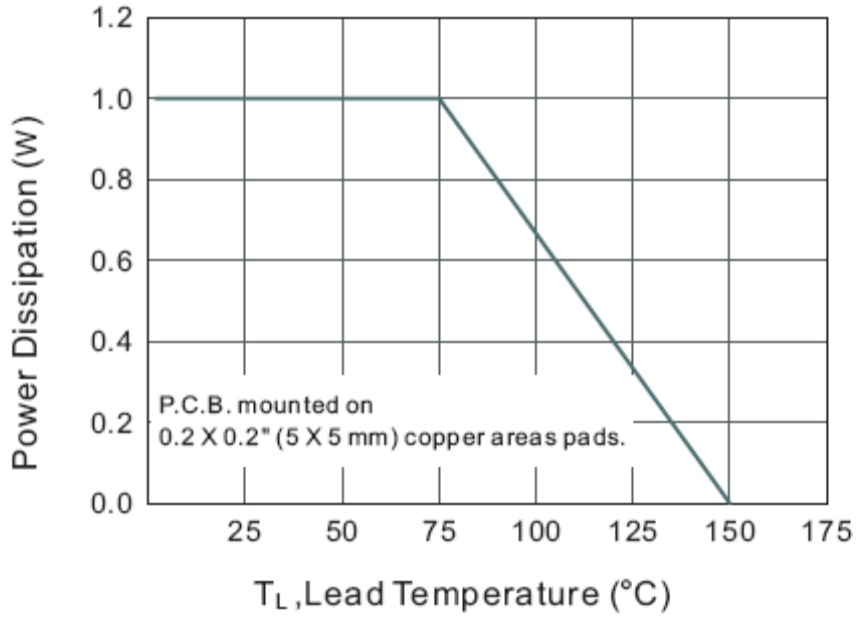
Note:

(1) V_{ZT} is tested with pulses (20 ms)

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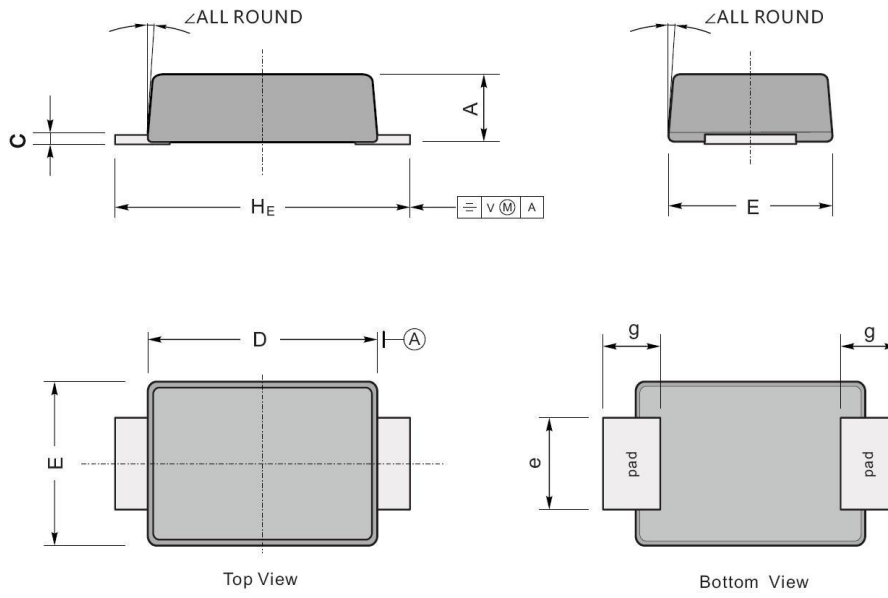
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电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SMAF



UNIT		A	C	D	E	e	g	H_E	\angle
mm	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	47	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

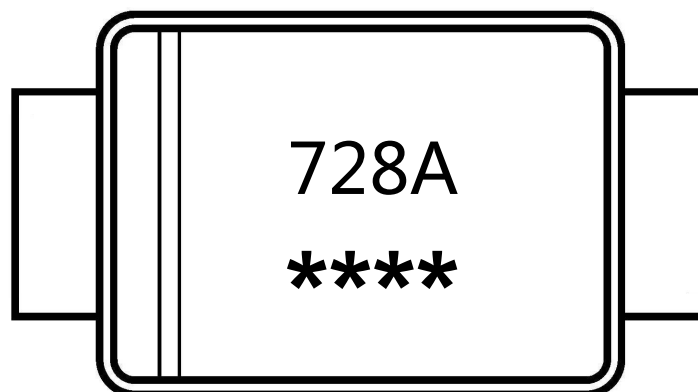
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印章说明 / Marking Instructions

Type number	Marking
1SMAF4728A	728A
1SMAF4729A	729A
1SMAF4730A	730A
1SMAF4731A	731A
1SMAF4732A	732A
1SMAF4733A	733A
1SMAF4734A	734A
1SMAF4735A	735A
1SMAF4736A	736A
1SMAF4737A	737A
1SMAF4738A	738A
1SMAF4739A	739A
1SMAF4740A	740A
1SMAF4741A	741A
1SMAF4742A	742A
1SMAF4743A	743A
1SMAF4744A	744A
1SMAF4745A	745A
1SMAF4746A	746A
1SMAF4747A	747A
1SMAF4748A	748A
1SMAF4749A	749A
1SMAF4750A	750A
1SMAF4751A	751A
1SMAF4752A	752A
1SMAF4753A	753A
1SMAF4754A	754A
1SMAF4755A	755A
1SMAF4756A	756A
1SMAF4757A	757A
1SMAF4758A	758A
1SMAF4759A	759A
1SMAF4760A	760A
1SMAF4761A	761A
1SMAF4762A	762A
1SMAF4763A	763A
1SMAF4764A	764A
1SMAF4765A	765A
1SMAF4766A	766A
1SMAF4767A	767A
1SMAF4768A	768A
1SMAF4769A	769A
1SMAF4770A	770A
1SMAF4771A	771A
1SMAF4772A	772A
1SMAF4773A	773A
1SMAF4774A	774A
1SMAF4775A	775A
1SMAF4776A	776A
1SMAF4777A	777A

印章说明 / Marking Instructions



说明：

728A： 为型号代码

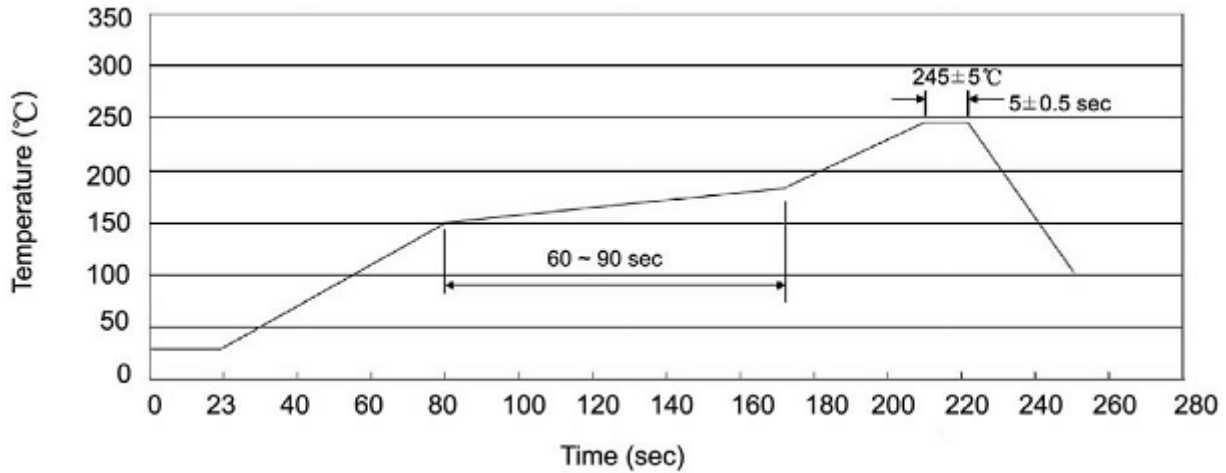
****： 为生产批号追溯码，第1个*为年月代码，后面3个*为当月小批号代码

Note:

728A： Product Type Code

****： Lot No. Code ,The 1st * means:YM Code ,The last 3 * means:little Lot No Code

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMAF	3000	5	15000	5	75000	7" ×11	185X180X105	390X385X205

使用说明 / Notices