



THE DATASHEET OF 1SMAF4731A

1SMAF4728A THRU 1SMAF4777A

SILICON PLANAR ZENER DIODE

FEATURES

- * Total power dissipation: Max. 1 W
- * Small plastic package suitable for surface mounted design.
- * Case: SMAF

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Simplified outline SMAF and symbol

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
DC Power dissipation at TL = 75 °C (Note 1)	P _D	1.0	W
Maximum forward voltage at If=200mA	V _F	1.2	Volts
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°C

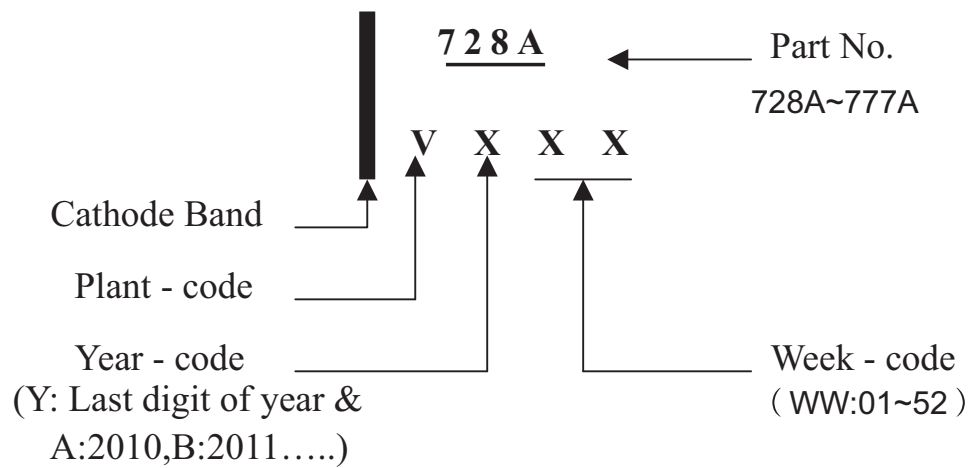
NOTES : 1. TL=Lead temperature at 3/8" (9.5mm) from body

2018-06/61
REV:0

TYPE	MARKING	Zener voltage Range Vz(V)@Izt			Test current	Dynamic impedance	Maximum Reverse leakage current		Admissibl e zener current
		Min	Nom	Max	Izt(mA)	ZzT(@IzT)	IR	VR	Izm(mA)
		(Volts)	(Volts)	(Volts)		(Ω)	(uA)	(Volts)	
1SMAF4728A	728A	3.1	3.3	3.5	75	10	100	1	285
1SMAF4729A	729A	3.4	3.6	3.8	69	10	100	1	263
1SMAF4730A	730A	3.7	3.9	4.1	64	9	50	1	243
1SMAF4731A	731A	4.06	4.3	4.56	58	9	25	1	219
1SMAF4732A	732A	4.5	4.7	4.93	53	8	10	1	203
1SMAF4733A	733A	4.84	5.1	5.36	49	7	10	1	186
1SMAF4734A	734A	5.32	5.6	5.92	45	5	10	2	170
1SMAF4735A	735A	5.86	6.2	6.51	41	2	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	10	5	127
1SMAF4738A	738A	7.79	8.2	8.67	31	4.5	10	6	116
1SMAF4739A	739A	8.6	9.1	9.59	28	5	10	7	104
1SMAF4740A	740A	9.5	10	10.5	25	7	10	7	95
1SMAF4741A	741A	10.4	11	11.6	23	8	5	8	86
1SMAF4742A	742A	11.4	12	12.6	21	9	5	9	79
1SMAF4743A	743A	12.4	13	14.1	19	10	5	10	71
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
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	1600	1	165	4.3
1SMAF4773A	773A	229	240	251	1	1800	1	180	3.9
1SMAF4774A	774A	249	260	271	1	2000	1	190	3.7
1SMAF4775A	775A	269	280	291	1	2100	1	205	3.4
1SMAF4776A	776A	289	300	315	1	2300	1	230	3.1
1SMAF4777A	777A	313	330	346	1	2500	1	250	2.8



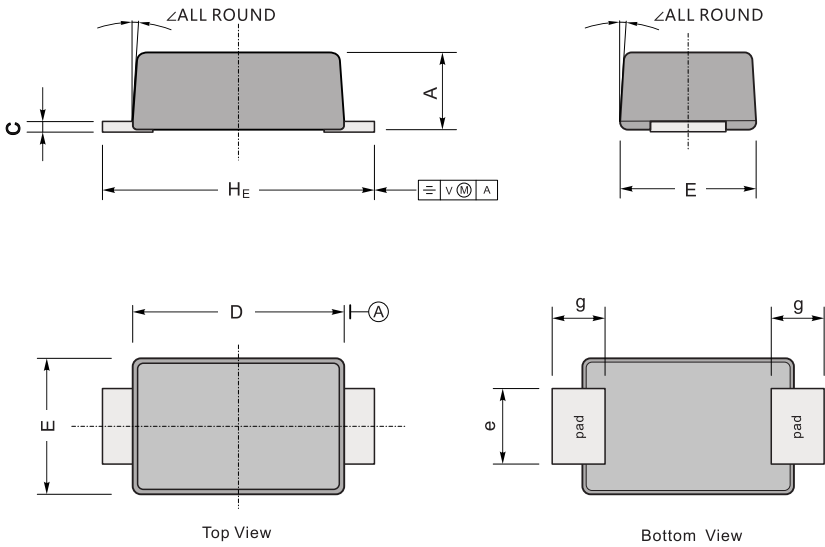
Marking on the body



PACKAGE OUTLINE

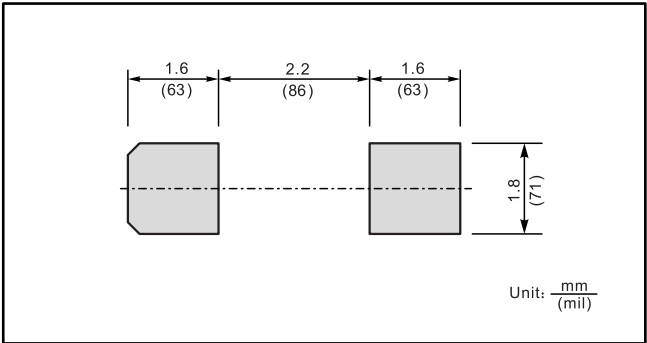
Plastic surface mounted package; 2 leads

SMAF



UNIT		A	C	D	E	e	g	H _E	$\angle$
mm	max	1.1	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	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

The recommended mounting pad size



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMAF	-T	3,000	12,000	---	---	178	390*205*310	96,000	---

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