

Silicon Planar Zener Diodes

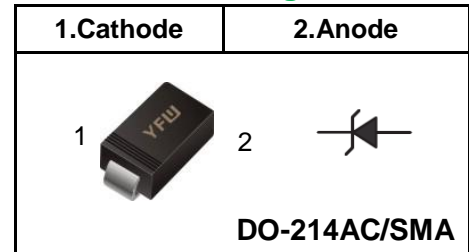
FEATURES

- ◆ Total power dissipation: Max. 1 W.
- ◆ Wide zener reverse voltage range 3.3V to 330V.
- ◆ Small plastic package suitable for surface mounted design.
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: DO-214AC/SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.055g / 0.002oz

Pinning

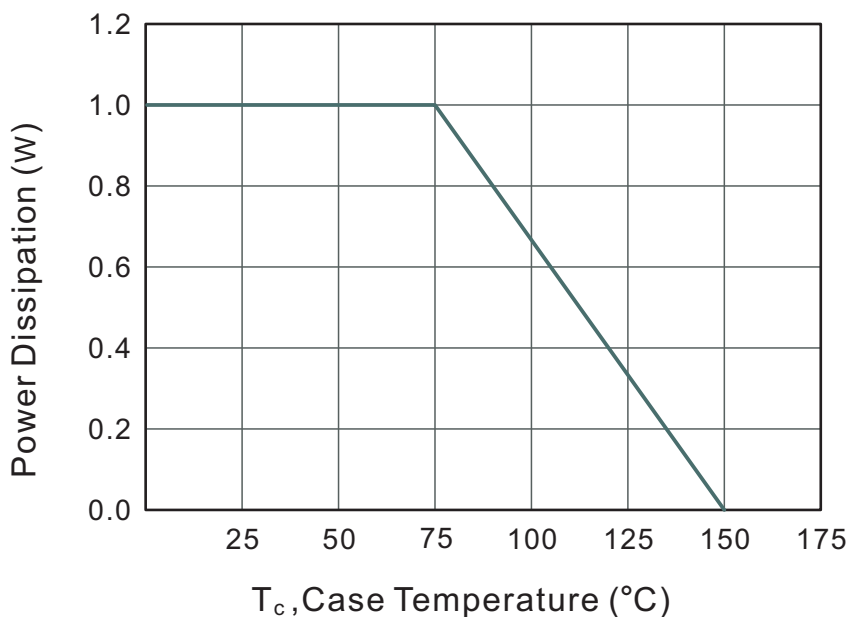


Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation at TL=75°C	P_D	1	W
Forward Voltage at IF = 200 mA	V_F	1.2	V
Junction Temperature Range	T_J	55 ~ +150	°C
Storage Temperature Range	T_s	-55 ~ +150	°C

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.

Fig.1 Maximum Continuous Power Derating



Characteristics at Ta = 25°C

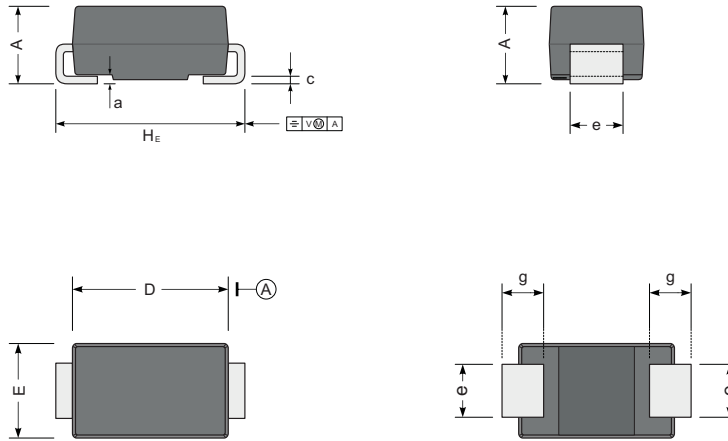
Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT}	Dynamic Impedance	Reverse Current		Admissible Zener Current
		V _{ZT} (at I _{ZT})				Z _{ZT} (at I _{ZT})	I _R	at V _R	
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)	I _{ZM} (mA)
1SMA4728A	728A	3.10	3.3	3.50	75	10	100	1	285
1SMA4729A	729A	3.40	3.6	3.80	69	10	100	1	263
1SMA4730A	730A	3.70	3.9	4.10	64	9.0	50	1	243
1SMA4731A	731A	4.06	4.3	4.56	58	9.0	25	1	219
1SMA4732A	732A	4.50	4.7	4.93	53	8.0	10	1	203
1SMA4733A	733A	4.84	5.1	5.36	49	7.0	10	1	186
1SMA4734A	734A	5.32	5.6	5.92	45	5.0	10	2	170
1SMA4735A	735A	5.86	6.2	6.51	41	2.0	10	3	154
1SMA4736A	736A	6.46	6.8	7.18	37	3.5	10	4	140
1SMA4737A	737A	7.12	7.5	7.88	34	4.0	10	5	127
1SMA4738A	738A	7.79	8.2	8.67	31	4.5	10	6	116
1SMA4739A	739A	8.60	9.1	9.59	28	5.0	10	7	104
1SMA4740A	740A	9.50	10	10.5	25	7.0	10	7	95
1SMA4741A	741A	10.4	11	11.6	23	8.0	5	8	86
1SMA4742A	742A	11.4	12	12.6	21	9.0	5	9	79
1SMA4743A	743A	12.4	13	14.1	19	10	5	10	71
1SMA4744A	744A	13.8	15	15.8	17	14	5	11	63
1SMA4745A	745A	15.2	16	17.1	16	16	5	12	58
1SMA4746A	746A	16.8	18	19.2	14	20	5	13	52
1SMA4747A	747A	19.0	20	21.2	13	22	5	15	47
1SMA4748A	748A	20.8	22	23.3	12	23	5	17	43
1SMA4749A	749A	22.8	24	26.0	11	25	5	18	38
1SMA4750A	750A	25.3	27	28.9	9.5	35	5	21	35
1SMA4751A	751A	28.2	30	32.0	8.5	40	5	23	31
1SMA4752A	752A	31.3	33	34.9	7.5	45	5	25	28
1SMA4753A	753A	34.2	36	37.9	7.0	50	5	27	26
1SMA4754A	754A	37.2	39	41.5	6.5	60	5	30	24
1SMA4755A	755A	40.9	43	45.6	6.0	70	1	32	22
1SMA4756A	756A	44.9	47	49.8	5.5	80	1	35	20
1SMA4757A	757A	48.6	51	54.0	5.0	95	1	38	18
1SMA4758A	758A	53.6	56	58.8	4.5	110	1	42	17
1SMA4759A	759A	58.9	62	65.6	4.0	125	1	47	15
1SMA4760A	760A	64.6	68	71.7	3.7	150	1	52	14
1SMA4761A	761A	71.2	75	78.8	3.3	175	1	56	12
1SMA4762A	762A	77.9	82	87.0	3.0	200	1	62	11
1SMA4763A	763A	86.0	91	96.0	2.8	250	1	69	10
1SMA4764A	764A	95.0	100	105	2.5	350	1	76	9.5
1SMA4765A	765A	104	110	116	2.3	450	1	84	8.6
1SMA4766A	766A	114	120	127	2.0	550	1	91	7.8
1SMA4767A	767A	125	135	142	1.9	700	1	100	7.0
1SMA4768A	768A	140	150	157	1.7	900	1	110	6.3
1SMA4769A	769A	155	165	172	1.6	1100	1	120	5.8
1SMA4770A	770A	170	180	191	1.4	1200	1	135	5.2
1SMA4771A	771A	189	200	211	1.2	1400	1	150	4.7
1SMA4772A	772A	209	220	231	1.0	1600	1	165	4.3
1SMA4773A	773A	229	240	251	1.0	1800	1	180	3.9
1SMA4774A	774A	249	260	271	1.0	2000	1	190	3.7
1SMA4775A	775A	269	280	291	1.0	2100	1	205	3.4
1SMA4776A	776A	289	300	315	1.0	2300	1	230	3.1
1SMA4777A	777A	313	330	346	1.0	2500	1	250	2.8

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

Package Outline

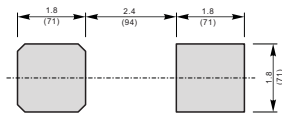
DO-214AC SMA

Plastic surface mounted package; 2 leads



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.42	4.5	2.80	5.2	0.31	1.6	1.5	0.3
	min	1.98	4.0	2.54	4.7	0.15	1.3	0.9	
mil	max	96	181	110	205	12	63	59	12
	min	78	157	100	185	6	51	35	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{\text{(mil)}}$

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AC SMA	Tape/Reel, 11" reel	5000	EIA-481-1
	Tape/Reel, 7" reel	2000	EIA-481-1