

Silicon Planar Zener Diodes

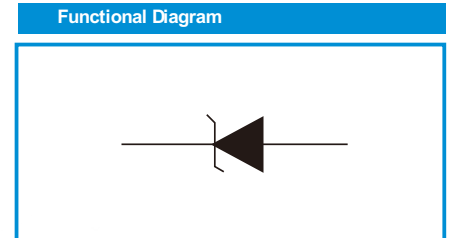
Features

- Total power dissipation: Max. 1 W.
- Wide zener reverse voltage range 3.3V to 330V.
- Small plastic package suitable for surface mounted design.



Mechanical Data

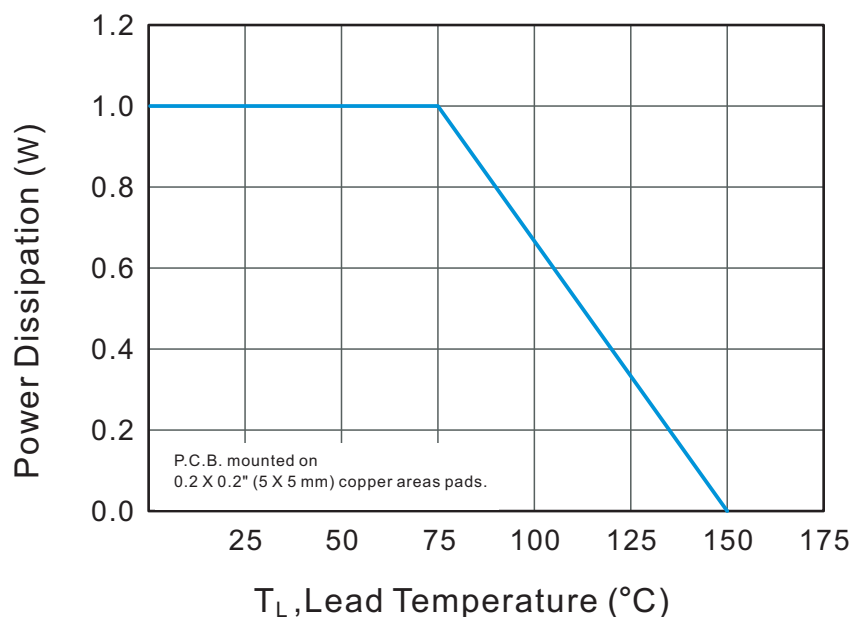
- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.055g / 0.002oz
- Polarity : Color band denotes cathode end



Maximum Ratings and Electiral characteristics (TA=25°C)

Parameter	SYMBOLS	VALUE	UNITS
Power Dissipation at T _L =75°C	P _D	1	W
Forward Voltage at I _F = 200 mA	V _F	1.2	V
Junction Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T _S	- 55 to + 150	°C

Fig.1 Maximum Continuous Power Derating



Electrical Characteristics (TA=25°C)

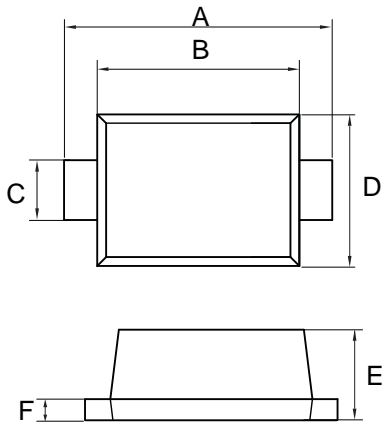
Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT} (mA)	Dynamic Impedance	Reverse Current		Admissible Zener Current I _{ZM} (mA)	Maximum Surge Current I _{SM} (mA)
		V _{ZT} (at I _{ZT})				Z _{ZT} (at I _{ZT})	I _R	at V _R		
		Min (V)	Nom (V)	Max (V)		Max (Ω)	Max (μA)	(V)		
LT4728A1F	728A	3.10	3.30	3.50	75.0	10	100	1	285	1370
LT4729A1F	729A	3.40	3.60	3.80	69.0	10	100	1	263	1255
LT4730A1F	730A	3.70	3.90	4.10	64.0	9	50	1	243	1160
LT4731A1F	731A	4.06	4.30	4.56	58.0	9	25	1	219	1050
LT4732A1F	732A	4.50	4.70	4.93	53.0	8	10	1	203	960
LT4733A1F	733A	4.84	5.10	5.36	49.0	7	10	1	186	885
LT4734A1F	734A	5.32	5.60	5.92	45.0	5	10	2	170	805
LT4735A1F	735A	5.86	6.20	6.51	41.0	2	10	3	154	730
LT4736A1F	736A	6.46	6.80	7.18	37.0	3.5	10	4	140	660
LT4737A1F	737A	7.12	7.50	7.88	34.0	4	10	5	127	605
LT4738A1F	738A	7.79	8.20	8.67	31.0	4.5	10	6	116	550
LT4739A1F	739A	8.60	9.10	9.59	28.0	5	10	7	104	500
LT4740A1F	740A	9.50	10.00	10.50	25.0	7	10	7	95	454
LT4741A1F	741A	10.40	11.00	11.60	23.0	8	5	8	86	414
LT4742A1F	742A	11.40	12.00	12.60	21.0	9	5	9	79	380
LT4743A1F	743A	12.40	13.00	14.10	19.0	10	5	10	71	344
LT4744A1F	744A	13.80	15.00	15.80	17.0	14	5	11	63	304
LT4745A1F	745A	15.20	16.00	17.10	16.0	16	5	12	58	285
LT4746A1F	746A	16.80	18.00	19.20	14.0	20	5	13	52	250
LT4747A1F	747A	19.00	20.00	21.20	13.0	22	5	15	47	225
LT4748A1F	748A	20.80	22.00	23.30	12.0	23	5	17	43	205
LT4749A1F	749A	22.80	24.00	26.00	11.0	25	5	18	38	190
LT4750A1F	750A	25.30	27.00	28.90	9.5	35	5	21	35	170
LT4751A1F	751A	28.20	30.00	32.00	8.5	40	5	23	31	150
LT4752A1F	752A	31.30	33.00	34.90	7.5	45	5	25	28	135
LT4753A1F	753A	34.20	36.00	37.90	7.0	50	5	27	26	125
LT4754A1F	754A	37.20	39.00	41.50	6.5	60	5	30	24	115
LT4755A1F	755A	40.90	43.00	45.60	6.0	70	1	32	22	110
LT4756A1F	756A	44.90	47.00	49.80	5.5	80	1	35	20	95
LT4757A1F	757A	48.60	51.00	54.00	5.0	95	1	38	18	90
LT4758A1F	758A	53.60	56.00	58.80	4.5	110	1	42	17	80
LT4759A1F	759A	58.90	62.00	65.60	4.0	125	1	47	15	70
LT4760A1F	760A	64.60	68.00	71.70	3.7	150	1	52	14	65
LT4761A1F	761A	71.20	75.00	78.80	3.3	175	1	56	12	60
LT4762A1F	762A	77.90	82.00	87.00	3.0	200	1	62	11	55
LT4763A1F	763A	86.00	91.00	96.00	2.8	250	1	69	10	50
LT4764A1F	764A	95.00	100.00	105.00	2.5	350	1	76	9.5	45
LT4765A1F	765A	104.00	110.00	116.00	2.3	450	1	84	8.6	40
LT4766A1F	766A	114.00	120.00	127.00	2.0	550	1	91	7.8	37
LT4767A1F	767A	125.00	135.00	142.00	1.9	700	1	100	7	34
LT4768A1F	768A	140.00	150.00	157.00	1.7	900	1	110	6.3	30
LT4769A1F	769A	155.00	165.00	172.00	1.6	1100	1	120	5.8	28
LT4770A1F	770A	170.00	180.00	191.00	1.4	1200	1	135	5.2	25
LT4771A1F	771A	189.00	200.00	211.00	1.2	1400	1	150	4.7	22
LT4772A1F	772A	209.00	220.00	231.00	1.0	1600	1	165	4.3	20
LT4773A1F	773A	229.00	240.00	251.00	1.0	1800	1	180	3.9	19
LT4774A1F	774A	249.00	260.00	271.00	1.0	2000	1	190	3.7	18
LT4775A1F	775A	269.00	280.00	291.00	1.0	2100	1	205	3.4	16
LT4776A1F	776A	289.00	300.00	315.00	1.0	2300	1	230	3.1	15
LT4777A1F	777A	313.00	330.00	346.00	1.0	2500	1	250	2.8	13

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

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

SMAF Package Outline

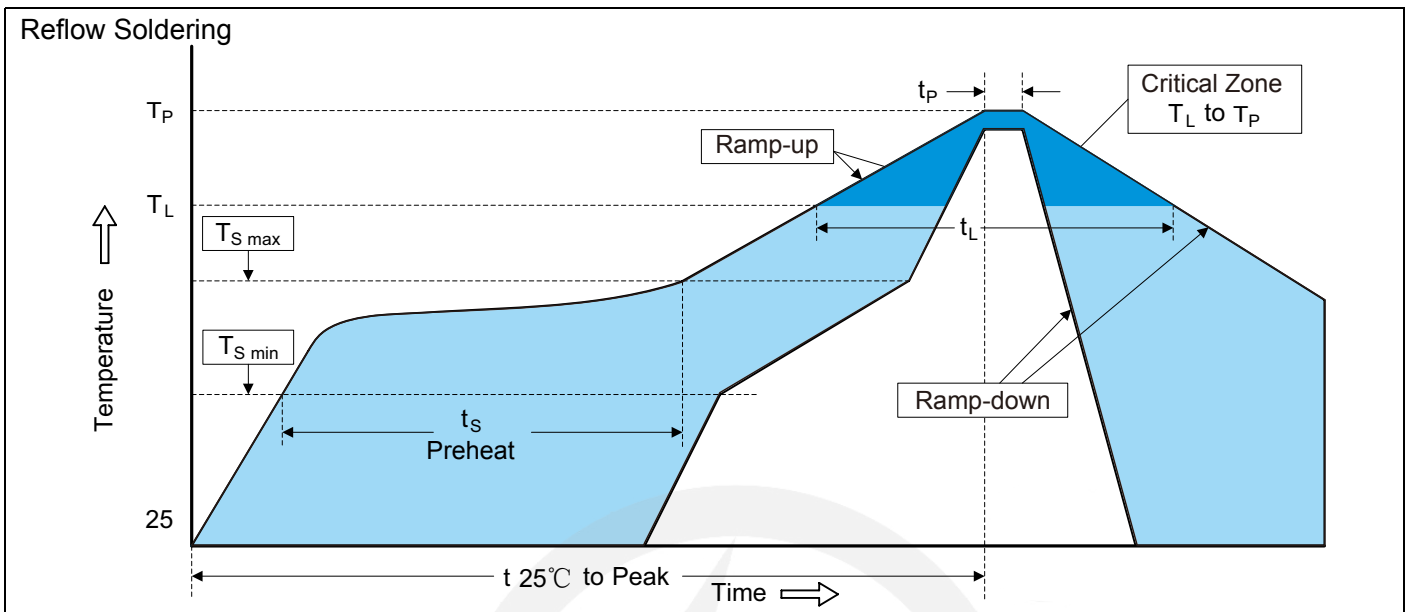
Unit: mm



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	4.40	4.90
B	3.30	3.70
C	1.30	1.60
D	2.40	2.70
E	0.90	1.20
F	0.12	0.20



Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat -Temperature Min (T _{S min}) -Temperature Max (T _{S max}) -Time (min to max) (t _S)	150°C 200°C 60-180 seconds
T _{S max} to T _L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T _L) -Time (t _L)	217°C 60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _P)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

7" Reel



D2 Φ178.0±2.0

D3 Φ50.0Min.

D4 Φ13.0±0.5

W1 16.0±2.0

Quantity: 3000PCS