

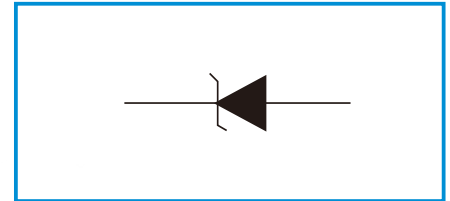
Silicon Planar Zener Diodes

Features

- Total power dissipation: Max. 1.5 W.
- Wide zener reverse voltage range 3.3V to 75V.
- Small plastic package suitable for surface mounted design.



Functional Diagram



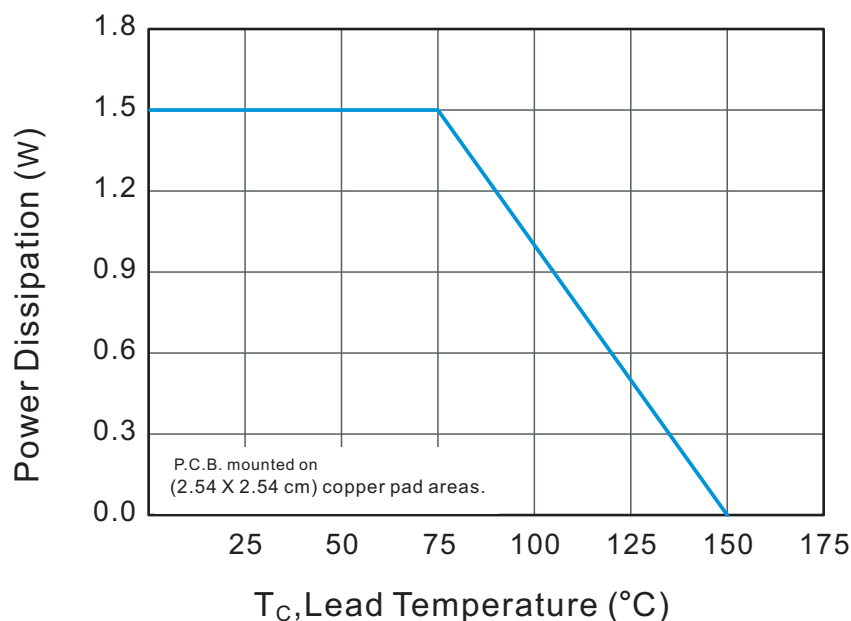
Mechanical Data

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00095oz
- Polarity: Color band denotes cathode end

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

Parameter	SYMBOLS	VALUE	UNITS
Power Dissipation at T _L =75°C	P _D	1.5	W
Forward Voltage at I _F = 200 mA	V _F	1.5	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



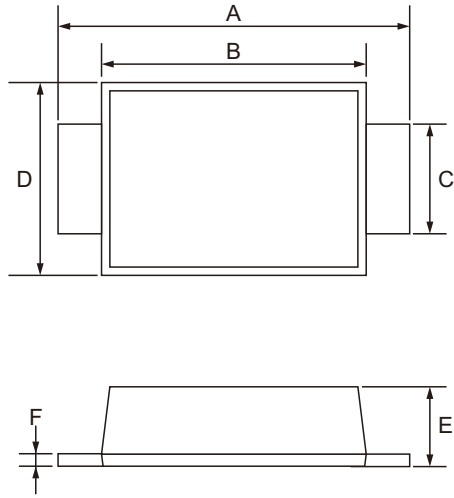
Electrical Characteristics (TA=25°C)

Type (note1)	Marking (note1)	Zener Voltage Range (note2)			Dynamic Impedance		Reverse Current		Admissible Zener Current I _{ZM} (mA)
			V _{ZT} (at I _{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)	
LT5913B1F5	913B	3.13	3.3	3.47	113.6	10	100	1	454
LT5914B1F5	914B	3.42	3.6	3.78	104.2	9.0	75	1	416
LT5915B1F5	915B	3.70	3.9	4.10	96.1	7.5	25	1	384
LT5916B1F5	916B	4.08	4.3	4.52	87.2	6.0	5	1	348
LT5917B1F5	917B	4.46	4.7	4.94	79.8	5.0	5	1.5	319
LT5918B1F5	918B	4.84	5.1	5.36	73.5	4.0	5	2	294
LT5919B1F5	919B	5.32	5.6	5.88	66.9	2.0	5	3	267
LT5920B1F5	920B	5.89	6.2	6.51	60.5	2.0	5	4	241
LT5921B1F5	921B	6.46	6.8	7.14	55	2.5	5	5.2	220
LT5922B1F5	922B	7.12	7.5	7.88	50	3.0	5	6	200
LT5923B1F5	923B	7.79	8.2	8.61	45.7	3.5	5	6.5	182
LT5924B1F5	924B	8.60	9.1	9.56	41.2	4.0	5	7	164
LT5925B1F5	925B	9.50	10	10.5	37.5	4.5	5	8	150
LT5926B1F5	926B	10.4	11	11.6	34	5.5	1	8.4	136
LT5927B1F5	927B	11.4	12	12.6	31.2	6.5	1	9	125
LT5928B1F5	928B	12.35	13	14.1	28.8	7.0	1	9.9	115
LT5929B1F5	929B	13.8	15	15.8	25	9.0	1	11.4	100
LT5930B1F5	930B	15.2	16	16.8	23.4	10	1	12.2	93
LT5931B1F5	931B	16.8	18	19.2	21	12	1	13.7	83
LT5932B1F5	932B	19.0	20	21.2	19	14	1	15.2	75
LT5933B1F5	933B	20.8	22	23.3	17	18	1	16.7	68
LT5934B1F5	934B	22.8	24	25.2	16	19	1	18.2	62
LT5935B1F5	935B	25.3	27	28.9	14	23	1	20.6	55
LT5936B1F5	936B	28.2	30	32.0	12.5	26	1	23	50
LT5937B1F5	937B	31.3	33	34.9	11.4	33	1	25	45
LT5938B1F5	938B	34.2	36	37.9	10.4	38	1	27	41
LT5939B1F5	939B	37.2	39	41.5	9.6	45	1	30	38
LT5940B1F5	940B	40.9	43	45.6	8.7	53	1	33	34
LT5941B1F5	941B	44.9	47	49.8	8.0	67	1	36	31
LT5942B1F5	942B	48.6	51	54.0	7.3	70	1	39	29
LT5943B1F5	943B	53.6	56	58.8	6.7	86	1	42	26
LT5944B1F5	944B	58.9	62	65.6	6.0	100	1	47	24
LT5945B1F5	945B	64.6	68	71.7	5.5	120	1	52	22
LT5946B1F5	946B	71.2	75	78.8	5.0	140	1	57	20

(1) Suffix "B" indicates ±5% tolerance

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

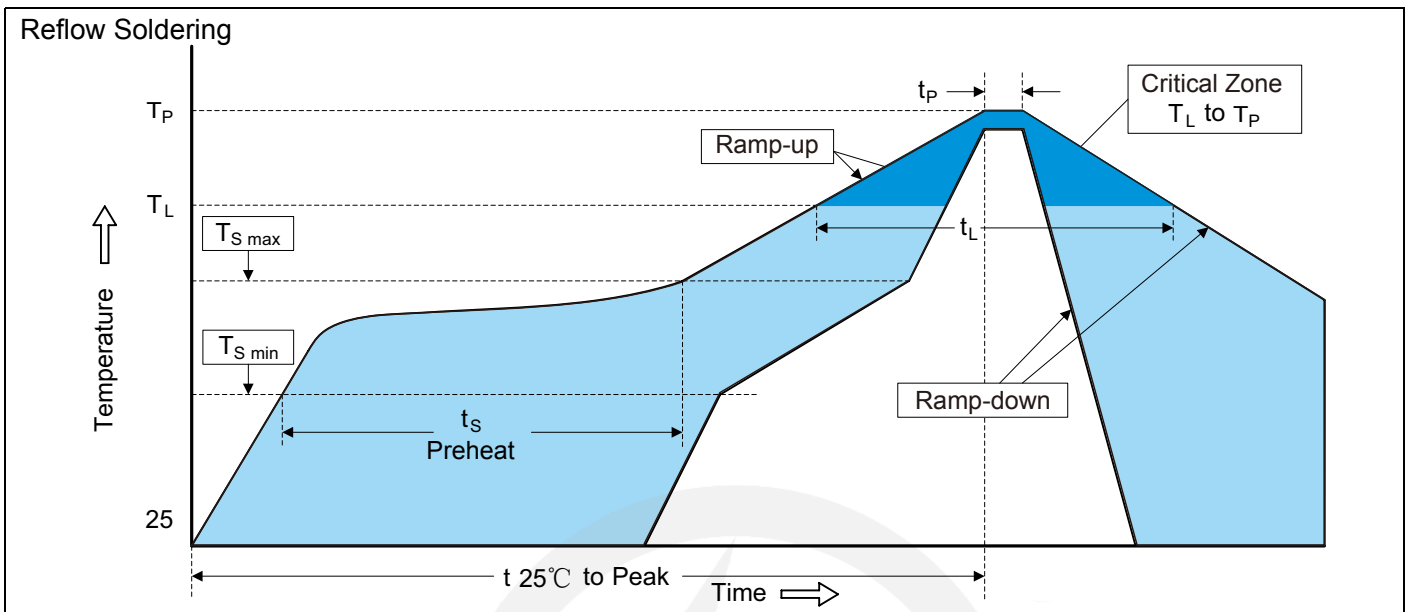
SMAF Package Outline



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