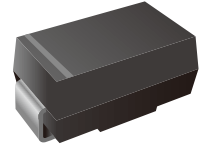


Silicon Planar Zener Diodes

Features

- Total power dissipation: Max. 1.5 W
- Wide zener reverse voltage range 3.6V to 200V
- Small plastic package suitable for surface mounted design
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

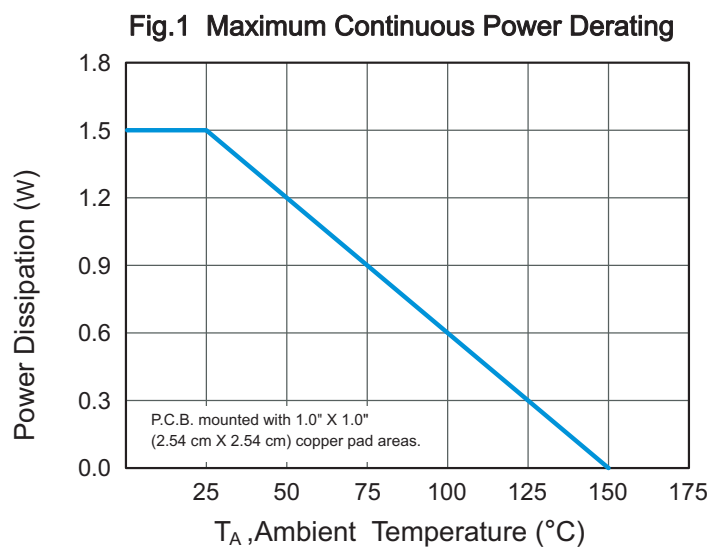
Ordering Information

Part Number	Shipping	Reel
LT59xxA1A5-TR5	5000PCS Tape&Reel	13 inchs
LT59xxA1A5-TR7K5	7500PCS Tape&Reel	13 inchs

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

Parameter	Symbol	Value	Unit
Power Dissipation at T _A =25°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
Typical Thermal Resistance (Note1)	R _{θJA} R _{θJC} R _{θJL}	100 20 25	°C/W

Note: (1) P.C.B. mounted with 0.2" X 0.2" (5 mm X 5 mm) copper pad areas.

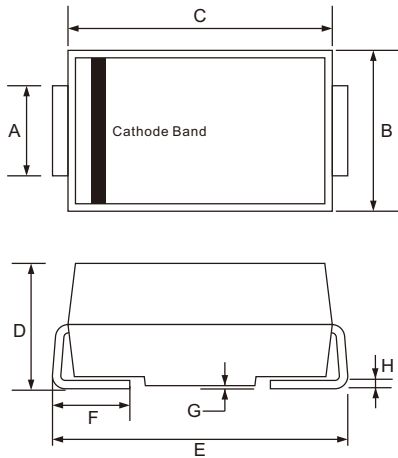


Characteristics at Ta = 25°C

Type	Marking	Zener Voltage Range (note1)				Dynamic Impedance	Reverse Current		Admissible Zener Current
		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)	I _{ZM} (mA)
LT5914A1A5	914A	3.24	3.6	3.96	104.2	9.0	75	1	416
LT5915A1A5	915A	3.51	3.9	4.29	96.1	7.5	25	1	384
LT5916A1A5	916A	3.87	4.3	4.73	87.2	6.0	5	1	348
LT5917A1A5	917A	4.23	4.7	5.17	79.8	5.0	5	1.5	319
LT5918A1A5	918A	4.59	5.1	5.61	73.5	4.0	5	2	294
LT5919A1A5	919A	5.04	5.6	6.16	66.9	2.0	5	3	267
LT5920A1A5	920A	5.58	6.2	6.82	60.5	2.0	5	4	241
LT5921A1A5	921A	6.12	6.8	7.48	55	2.5	5	5.2	220
LT5922A1A5	922A	6.75	7.5	8.25	50	3.0	5	6	200
LT5923A1A5	923A	7.38	8.2	9.02	45.7	3.5	5	6.5	182
LT5924A1A5	924A	8.19	9.1	10.01	41.2	4.0	5	7	164
LT5925A1A5	925A	9	10	11	37.5	4.5	5	8	150
LT5926A1A5	926A	9.9	11	12.1	34	5.5	1	8.4	136
LT5927A1A5	927A	10.8	12	13.2	31.2	6.5	1	9	125
LT5928A1A5	928A	11.7	13	14.3	28.8	7.0	1	9.9	115
LT5929A1A5	929A	13.5	15	16.5	25	9.0	1	11.4	100
LT5930A1A5	930A	14.4	16	17.6	23.4	10	1	12.2	93
LT5931A1A5	931A	16.2	18	19.8	21	12	1	13.7	83
LT5932A1A5	932A	18	20	22	19	14	1	15.2	75
LT5933A1A5	933A	19.8	22	24.2	17	18	1	16.7	68
LT5934A1A5	934A	21.6	24	26.4	16	19	1	18.2	62
LT5935A1A5	935A	24.3	27	29.7	14	23	1	20.6	55
LT5936A1A5	936A	27	30	33	12.5	26	1	23	50
LT5937A1A5	937A	29.7	33	36.3	11.4	33	1	25	45
LT5938A1A5	938A	32.4	36	39.6	10.4	38	1	27	41
LT5939A1A5	939A	35.1	39	42.9	9.6	45	1	30	38
LT5940A1A5	940A	38.7	43	47.3	8.7	53	1	33	34
LT5941A1A5	941A	42.3	47	51.7	8.0	67	1	36	31
LT5942A1A5	942A	45.9	51	56.1	7.3	70	1	39	29
LT5943A1A5	943A	50.4	56	61.6	6.7	86	1	42	26
LT5944A1A5	944A	55.8	62	68.2	6.0	100	1	47	24
LT5945A1A5	945A	61.2	68	74.8	5.5	120	1	52	22
LT5946A1A5	946A	67.5	75	82.5	5.0	140	1	57	20
LT5947A1A5	947A	73.8	82	90.2	4.6	160	1	62	18
LT5948A1A5	948A	81.9	91	100.1	4.1	200	1	69	16
LT5949A1A5	949A	90	100	110	3.7	250	1	76	15
LT5950A1A5	950A	99	110	121	3.4	300	1	84	13
LT5951A1A5	951A	108	120	132	3.1	380	1	91	12
LT5952A1A5	952A	117	130	143	2.9	450	1	100	11
LT5953A1A5	953A	135	150	165	2.5	600	1	114	10
LT5954A1A5	954A	144	160	176	2.3	700	1	121.6	9.0
LT5955A1A5	955A	162	180	198	2.1	900	1	136.8	8.0
LT5956A1A5	956A	180	200	220	1.9	1200	1	152	7.0

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

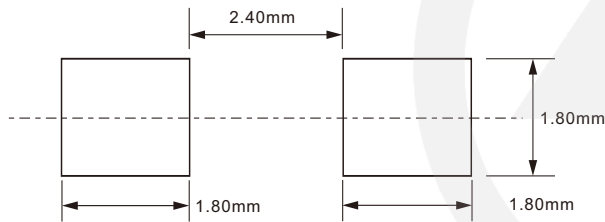
SMA Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.25	1.65
B	2.30	2.79
C	4.00	4.75
D	1.90	2.50
E	4.70	5.28
F	0.76	1.52
G	0.203 TYP.	
H	0.15	0.31

SMA Suggested Pad Layout

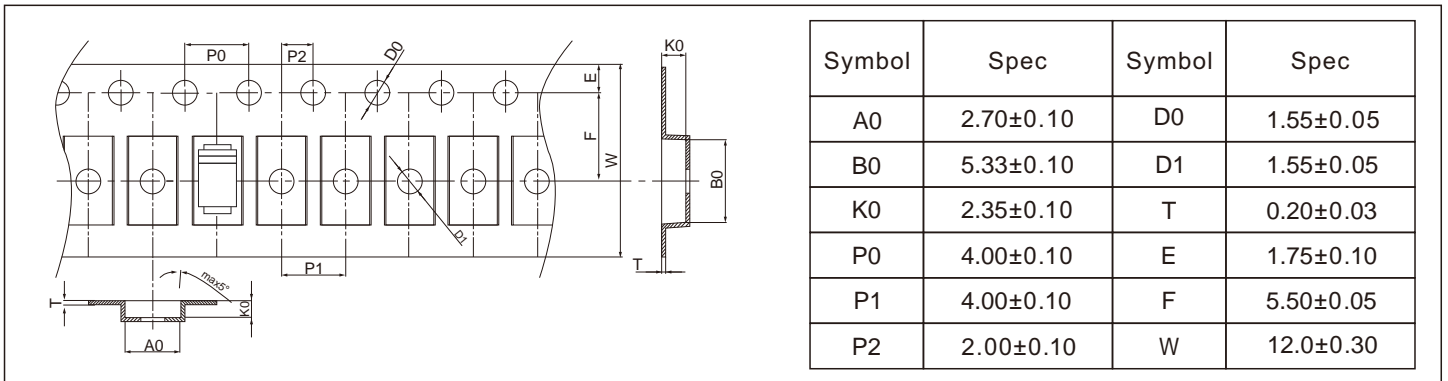


Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purpose only.

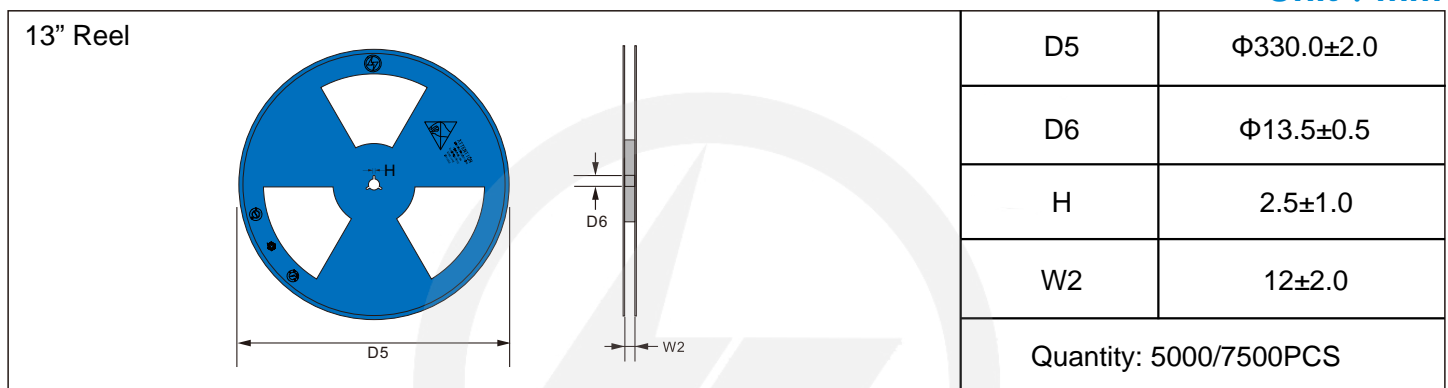
Carrier Tape Dimensions

Unit : mm

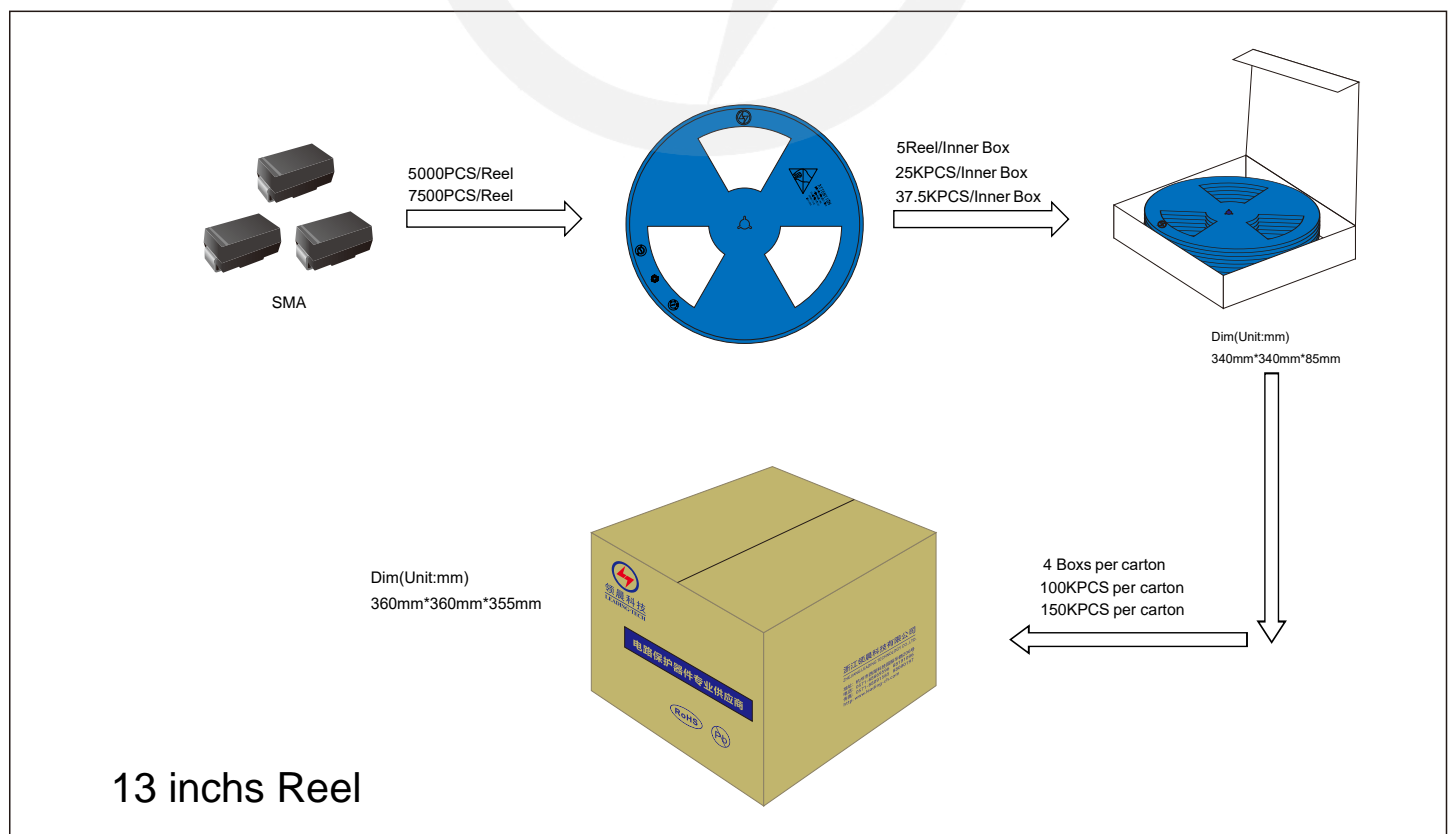


Reel Dimensions

Unit : mm



Packaging





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})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	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.

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Version Update information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.5.19	2024.5.19	3.0	New File	/	Ding	
02	2025.06.17	2025.06.17	3.1	Update packaging information	/	Ding	