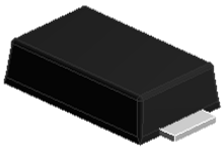
L1N5923 thru L1N5956

Surface Mount Zener Diodes

Vz Range:8.2 to 200V Power Dissipation:1.5W

Features



eSGB (SMAF)

- Toal power dissipation:max,1.5W
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile， typical thickness 1.0mm
- For use in stabilizing and clipping circuits with high power rating

Maximum Ratings and Thermal Characteristics

(TA = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener current		See Next Table	
Power dissipation at Tamb=50℃	Ptot	1.5	W
Maximum instantaneous forward voltage at 200mA	V_F	1.2	V
Thermal resistance junction to ambient air	Rthja	85	℃/W
Operating junction and storage temperature range	TJ, TSTG	-65 to +175	℃

Note1:Thermal resistance from junction to mount,mounted on PCB with 8.0×8.0mm copper pads

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Part Number	Zener voltage		Test current	Dynamic impedance	Knee current	Knee impedance	Reverse current	Reverse voltage	Max.DC current
	VZ /V		IZT	ZZT	IZK	ZZK	IR(Max)	VR	IZM
	Vz(MIN)	Vz(MAX)	m A	Ω	m A	Ω	μAdc	V	m A
L1N5923	7.79	8.61	45.7	3.5	0.5	400	5	6.5	182
L1N5924	8.65	9.56	41.2	4	0.5	500	5	7	164
L1N5925	9.5	10.5	37.5	4.5	0.25	500	5	8	150
L1N5926	10.45	11.55	34.1	5.5	0.25	550	1	8.4	136
L1N5927	11.4	12.6	31.2	6.5	0.25	550	1	9.1	125
L1N5928	12.35	13.65	28.8	7	0.25	550	1	9.9	115
L1N5929	14.25	15.75	25	9	0.25	600	1	11.4	100
L1N5930	15.2	16.8	23.4	10	0.25	600	1	12.2	93

L1N5923 thru L1N5956

Surface Mount Zener Diodes

Vz Range:8.2 to 200V Power Dissipation:1.5W

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Part Number	Zener voltage		Test current	Dynamic impedance	Knee current	Knee impedance	Reverse current	Reverse voltage	Max.DC current
	VZ /V		IZT	ZZT	IZK	ZZK	IR(Max)	VR	IZM
	Vz(MIN)	Vz(MAX)	m A	Ω	m A	Ω	μAdc	V	m A
L1N5931	17.1	18.9	20.8	12	0.25	650	1	13.7	83
L1N5932	19	21	18.7	14	0.25	650	1	15.2	75
L1N5933	20.9	23.1	17	17.5	0.25	650	1	16.7	68
L1N5934	22.8	25.2	15.6	19	0.25	700	1	18.2	62
L1N5935	25.65	28.35	13.9	23	0.25	700	1	20.6	55
L1N5936	28.5	31.5	12.5	28	0.25	750	1	22.8	50
L1N5937	31.35	34.65	11.4	33	0.25	800	1	25.1	45
L1N5938	34.2	37.8	10.4	38	0.25	850	1	27.4	41
L1N5939	37.05	40.95	9.6	45	0.25	900	1	29.7	38
L1N5940	40.85	45.15	8.7	53	0.25	950	1	32.7	34
L1N5941	44.65	49.35	8	67	0.25	1000	1	35.8	31
L1N5942	48.45	53.55	7.3	70	0.25	1100	1	38.8	29
L1N5943	53.2	58.8	6.7	86	0.25	1300	1	42.6	26
L1N5944	58.9	65.1	6	100	0.25	1500	1	47.1	24
L1N5945	64.6	71.4	5.5	120	0.25	1700	1	51.7	22
L1N5946	71.25	78.8	5	140	0.25	2000	1	56	20
L1N5947	77.9	86.1	4.6	160	0.25	2500	1	62.2	18
L1N5948	86.45	95.6	4.1	200	0.25	3000	1	69.2	16
L1N5949	95	105	3.7	250	0.25	3100	1	76	15
L1N5950	104.5	115.5	3.4	300	0.25	4000	1	83.6	13
L1N5951	114	126	3.1	380	0.25	4500	1	91.2	12
L1N5952	123.5	136.5	2.9	450	0.25	5000	1	98.8	11
L1N5953	142.5	157.5	2.5	600	0.25	6000	1	114	10
L1N5954	152	168	2.3	700	0.25	6500	1	121.6	9
L1N5955	171	189	2.1	900	0.25	7000	1	136.8	8
L1N5956	190	210	1.9	1200	0.25	8000	1	152	7

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

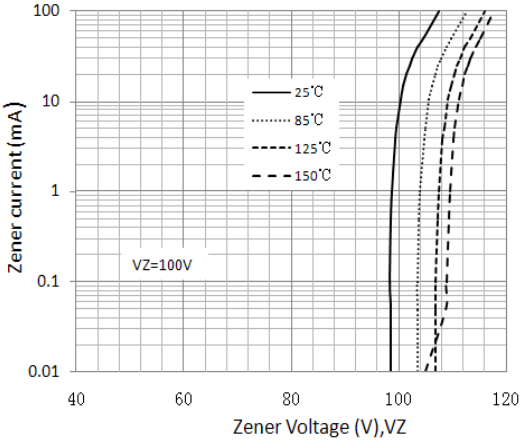


Figure 1. Typical Zener Voltage

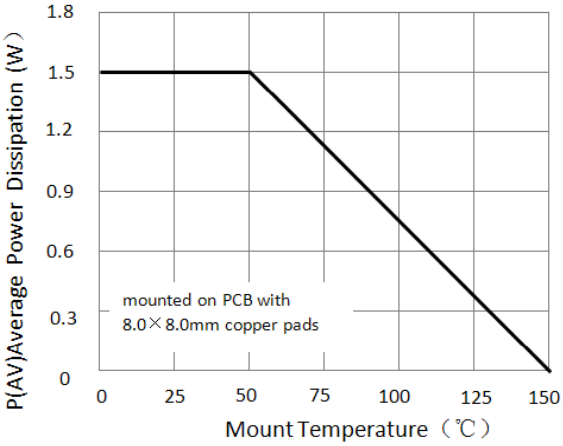


Figure 2. Steady State POWER Derating

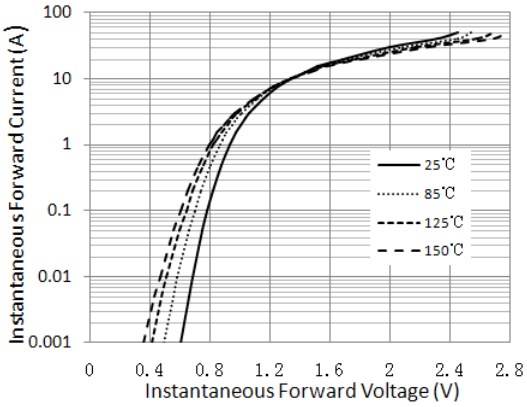


Figure 3. Typical Instantaneous Forward Characteristics

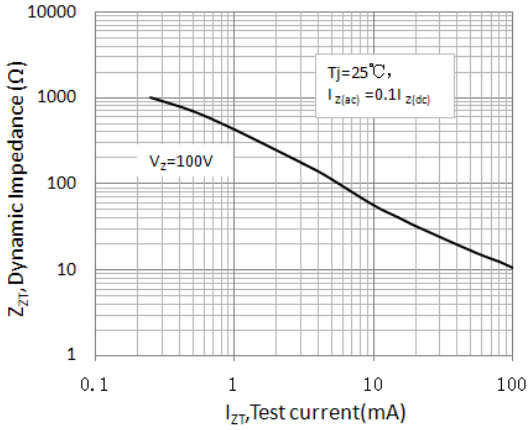


Figure 4. Typical Zener Impedance

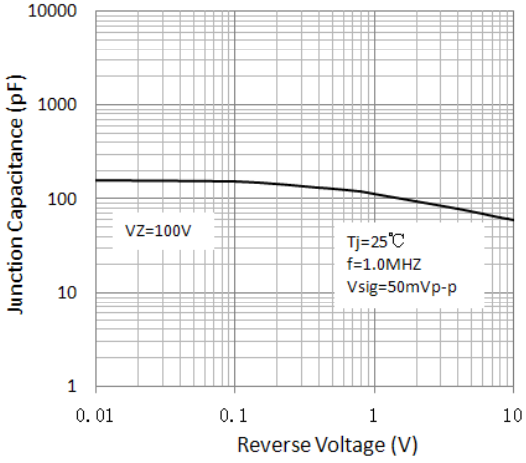
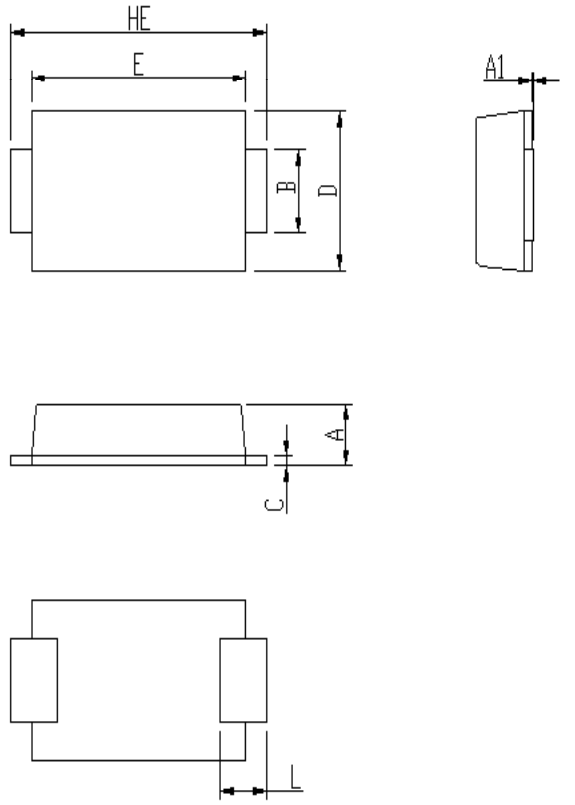


Figure 5. Typical Junction Capacitance

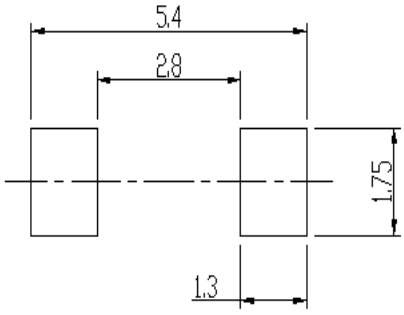
Package Outline Dimensions

in inches (millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint

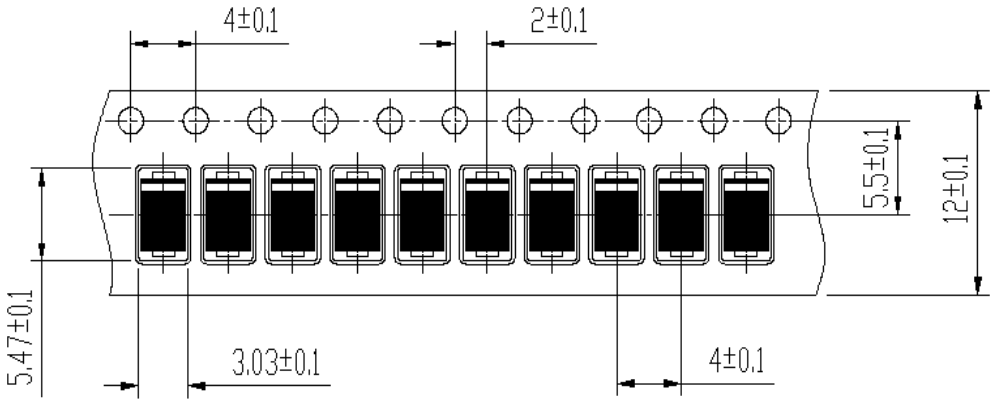


Packing Information

Packing quantities:

10,000 pcs/Reel，12mm Tape, 13" Reel

Tape & Reel Specification



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