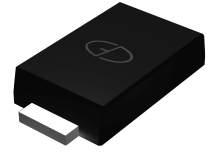


L1N5923 thru L1N5941

Surface Mount Zener Diodes
 Vz Range: 8.2 to 47V Power Dissipation: 1.5W

Features

- Total 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
- Zener voltage tolerance is ±5%



Package: eSGB(SMAF)



RoHS
COMPLIANT

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Zener Current		See Next Table	
Power Dissipation at Ta=50°C	P _{tot}	1.5	W
Maximum Instantaneous Forward Voltage at 200mA	V _F	1.2	V
Thermal Resistance Junction to Ambient	R _{thja}	85	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Note 1: Thermal resistance from junction to mount, mounted on PCB with 8.0×8.0mm copper pads

L1N5923 thru L1N5941

Surface Mount Zener Diodes

Vz Range: 8.2 to 47V Power Dissipation: 1.5W

Electrical Characteristics (T_A = 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(Nominal)	Vz(Max)	mA	Ω	mA	Ω	μA _{dc}	V	mA
L1N5923	7.79	8.2	8.61	45.7	3.5	0.5	400	5	6.5	182
L1N5924	8.65	9.1	9.56	41.2	4	0.5	500	5	7	164
L1N5925	9.5	10	10.5	37.5	4.5	0.25	500	5	8	150
L1N5926	10.45	11	11.55	34.1	5.5	0.25	550	1	8.4	136
L1N5927	11.4	12	12.6	31.2	6.5	0.25	550	1	9.1	125
L1N5928	12.35	13	13.65	28.8	7	0.25	550	1	9.9	115
L1N5929	14.25	15	15.75	25	9	0.25	600	1	11.4	100
L1N5930	15.2	16	16.8	23.4	10	0.25	600	1	12.2	93
L1N5931	17.1	18	18.9	20.8	12	0.25	650	1	13.7	83
L1N5932	19	20	21	18.7	14	0.25	650	1	15.2	75
L1N5933	20.9	22	23.1	17	17.5	0.25	650	1	16.7	68
L1N5934	22.8	24	25.2	15.6	19	0.25	700	1	18.2	62
L1N5935	25.65	27	28.35	13.9	23	0.25	700	1	20.6	55
L1N5936	28.5	30	31.5	12.5	28	0.25	750	1	22.8	50
L1N5937	31.35	33	34.65	11.4	33	0.25	800	1	25.1	45
L1N5938	34.2	36	37.8	10.4	38	0.25	850	1	27.4	41
L1N5939	37.05	39	40.95	9.6	45	0.25	900	1	29.7	38
L1N5940	40.85	43	45.15	8.7	53	0.25	950	1	32.7	34
L1N5941	44.65	47	49.35	8	67	0.25	1000	1	35.8	31

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

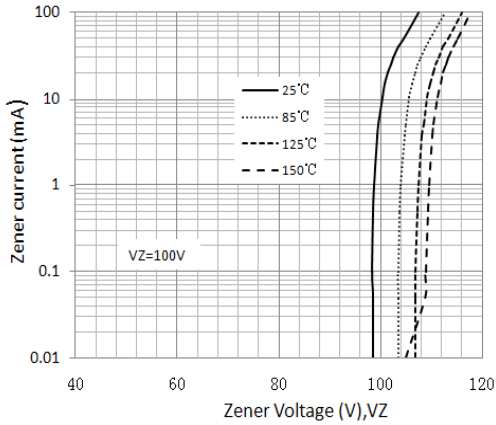


Figure 1. Typical Zener Voltage

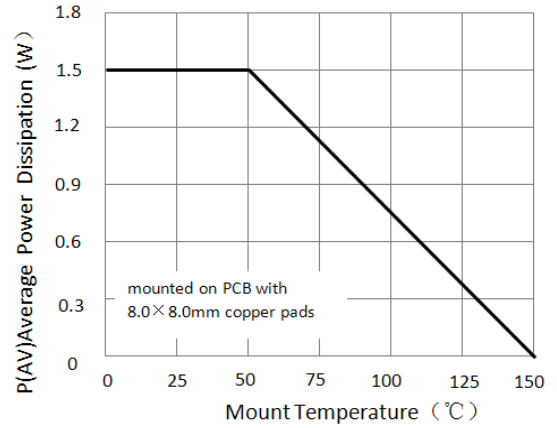


Figure 2. Steady State POWER Derating

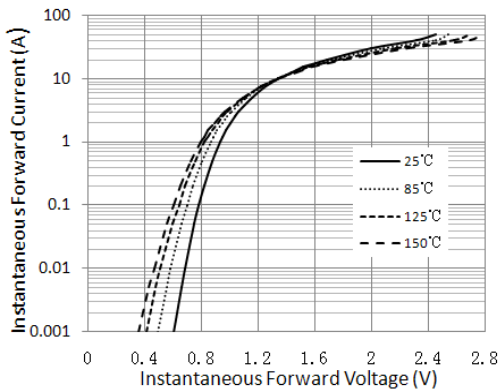


Figure 3. Typical Instantaneous Forward Characteristics

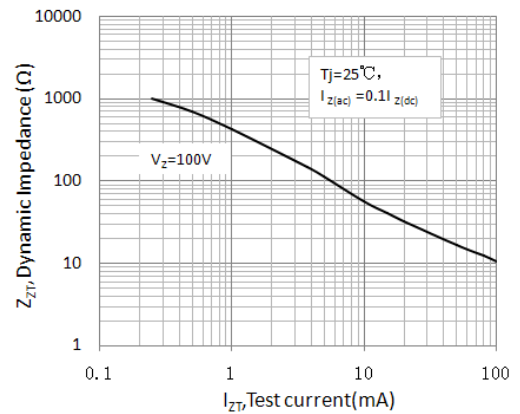


Figure 4. Typical Zener Impedance

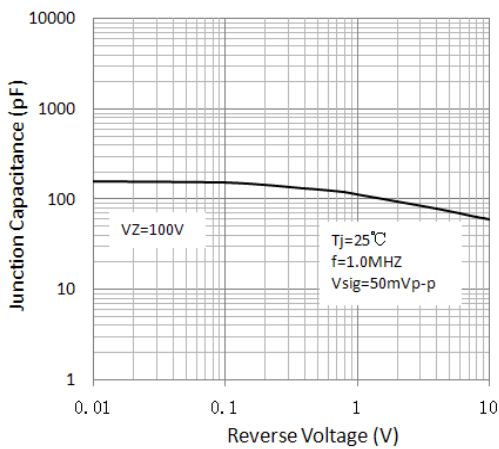


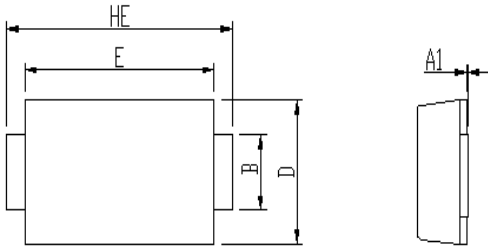
Figure 5. Typical Junction Capacitance

L1N5923 thru L1N5941

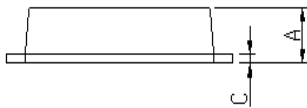
Surface Mount Zener Diodes
 Vz Range: 8.2 to 47V Power Dissipation: 1.5W

Package Outline Dimensions

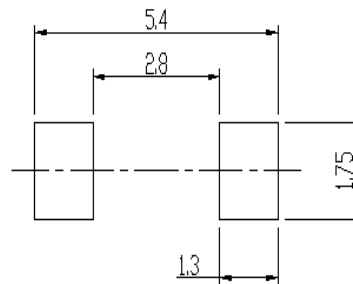
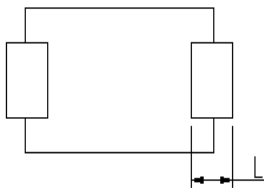
eSGB(SMAF)



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:

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	21K	84K
13"	10K	20K	180K

Tape & Reel Specification

