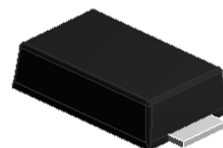


Features

- Total power dissipation: max, 2.0W
- 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



eSGB (SMAF)

Maximum Ratings and Thermal Characteristics

(T_A = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener current		See Next Table	
Power dissipation at T _{amb} =50°C	P _{tot}	2.0	W
Maximum instantaneous forward voltage at 200mA	V _F	1.2	V
Thermal resistance junction to ambient air	R _{thja}	85	°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175	°C

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

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
	V _Z /V		I _{ZT}	Z _{zt}	I _{ZK}	Z _{zk}	I _R (Max)	V _R	I _{ZM}
	V _Z (MIN)	V _Z (MAX)	m A	Ω	m A	Ω	μA _{dc}	V	m A
L2N5923B	7.79	8.61	61.0	3.5	0.5	400	5	6.5	244
L2N5924B	8.65	9.56	54.9	4	0.5	500	5	7	220
L2N5925B	9.5	10.5	50.0	4.5	0.25	500	5	8	200
L2N5926B	10.45	11.55	45.5	5.5	0.25	550	1	8.4	182
L2N5927B	11.4	12.6	41.7	6.5	0.25	550	1	9.1	167
L2N5928B	12.35	13.65	38.5	7	0.25	550	1	9.9	154

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
L2N5929B	14.25	15.75	35.7	9	0.25	600	1	11.4	143
L2N5930B	15.2	16.8	31.3	10	0.25	600	1	12.2	125
L2N5931B	17.1	18.9	27.8	12	0.25	650	1	13.7	111
L2N5932B	19	21	25.0	14	0.25	650	1	15.2	100
L2N5933B	20.9	23.1	22.7	17.5	0.25	650	1	16.7	91
L2N5934B	22.8	25.2	20.8	19	0.25	700	1	18.2	83
L2N5935B	25.65	28.35	18.5	23	0.25	700	1	20.6	74
L2N5936B	28.5	31.5	16.7	28	0.25	750	1	22.8	67
L2N5937B	31.35	34.65	15.2	33	0.25	800	1	25.1	61
L2N5938B	34.2	37.8	13.9	38	0.25	850	1	27.4	56
L2N5939B	37.05	40.95	12.8	45	0.25	900	1	29.7	51
L2N5940B	40.85	45.15	11.6	53	0.25	950	1	32.7	47
L2N5941B	44.65	49.35	10.6	67	0.25	1000	1	35.8	43
L2N5942B	48.45	53.55	9.8	70	0.25	1100	1	38.8	39
L2N5943B	53.2	58.8	8.9	86	0.25	1300	1	42.6	36
L2N5944B	58.9	65.1	8.1	100	0.25	1500	1	47.1	32
L2N5945B	64.6	71.4	7.4	120	0.25	1700	1	51.7	29
L2N5946B	71.25	78.8	6.7	140	0.25	2000	1	56	27
L2N5947B	77.9	86.1	6.1	160	0.25	2500	1	62.2	24
L2N5948B	86.45	95.6	5.5	200	0.25	3000	1	69.2	22
L2N5949B	95	105	5.0	250	0.25	3100	1	76	20
L2N5950B	104.5	115.5	4.5	300	0.25	4000	1	83.6	18
L2N5951B	114	126	4.2	380	0.25	4500	1	91.2	17
L2N5952B	123.5	136.5	3.8	450	0.25	5000	1	98.8	15
L2N5953B	142.5	157.5	3.3	600	0.25	6000	1	114	13
L2N5954B	152	168	3.1	700	0.25	6500	1	121.6	13
L2N5955B	171	189	2.8	900	0.25	7000	1	136.8	11
L2N5956B	190	210	2.5	1200	0.25	8000	1	152	10

Ratings and Characteristics Curves

(T_A = 25°C unless otherwise noted)

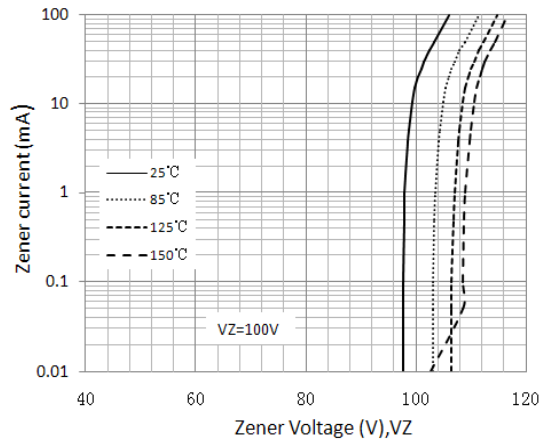


Figure 1. Typical Zener Voltage, V_Z=100V

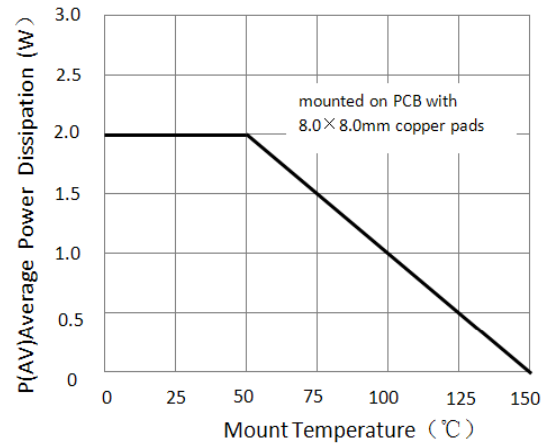


Figure 2. Steady State POWER Derating

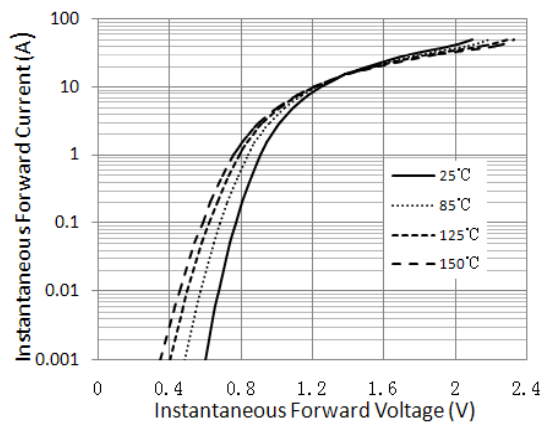


Figure 3. Typical Instantaneous Forward Characteristics

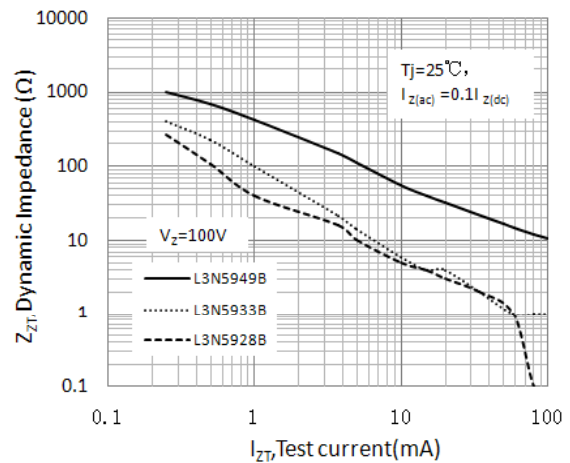


Figure 4. Typical Zener Impedance

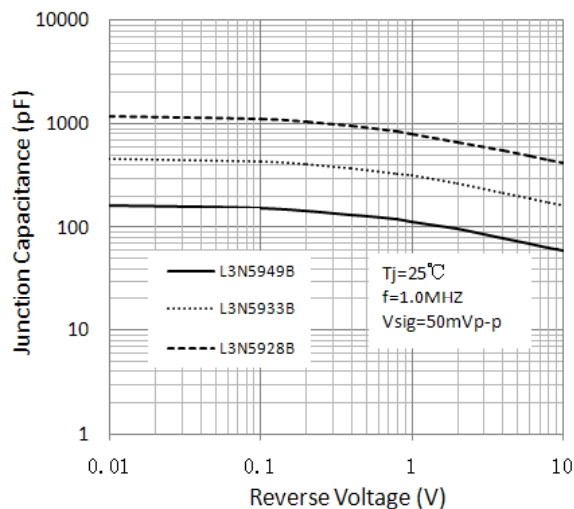


Figure 5. Typical Junction Capacitance

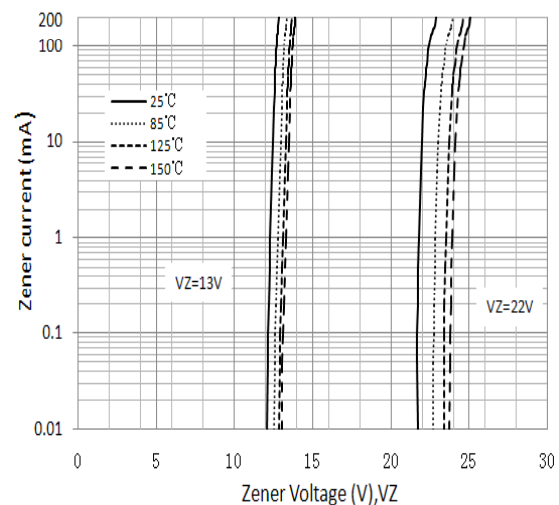
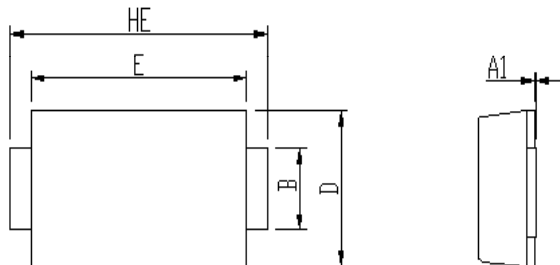


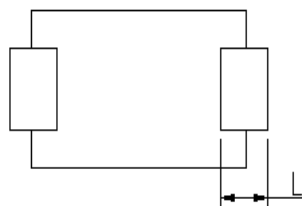
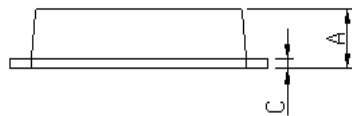
Figure 6. Typical Zener Voltage, V_Z=13V /22V

Package Outline Dimensions

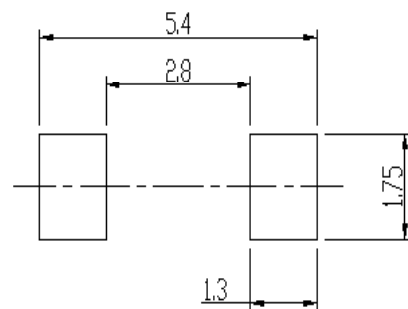
in inches (millimeters)



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

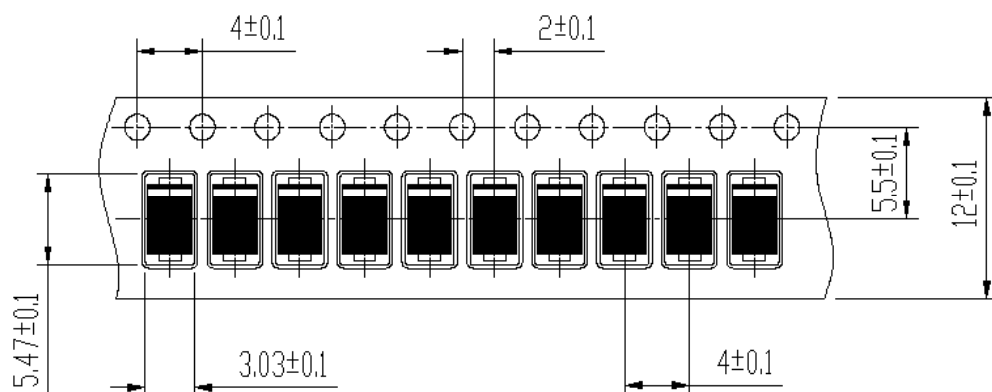


Packing Information

Packing quantities:

10,000 pcs/Reel, 12mm Tape, 13" Reel

Tape & Reel Specification





L2N5923B thru L2N5956B

Surface Mount Zener Diodes

Vz Range:8.2 to 200V Power Dissipation:2W

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