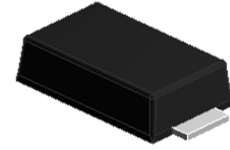


Features

- Total power dissipation: max, 3.0W
- 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

(TA = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener current		See Next Table	
Power dissipation	P _{tot}	3.0	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 (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
	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
L3N5923B	7.79	8.61	91.5	3.5	0.5	400	5	6.5	341
L3N5924B	8.65	9.56	82.4	4	0.5	500	5	7	308
L3N5925B	9.5	10.5	75.0	4.5	0.25	500	5	8	280
L3N5926B	10.45	11.55	68.2	5.5	0.25	550	1	8.4	255
L3N5927B	11.4	12.6	62.5	6.5	0.25	550	1	9.1	233
L3N5928B	12.35	13.65	57.7	7	0.25	550	1	9.9	215



L3N5923B thru L3N5956B

Surface Mount Zener Diodes

Vz Range:8.2 to 200V Power Dissipation:3W

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
L3N5929B	14.25	15.75	53.6	9	0.25	600	1	11.4	200
L3N5930B	15.2	16.8	46.9	10	0.25	600	1	12.2	175
L3N5931B	17.1	18.9	41.7	12	0.25	650	1	13.7	156
L3N5932B	19	21	37.5	14	0.25	650	1	15.2	140
L3N5933B	20.9	23.1	34.1	17.5	0.25	650	1	16.7	127
L3N5934B	22.8	25.2	31.3	19	0.25	700	1	18.2	117
L3N5935B	25.65	28.35	27.8	23	0.25	700	1	20.6	104
L3N5936B	28.5	31.5	25.0	28	0.25	750	1	22.8	93
L3N5937B	31.35	34.65	22.7	33	0.25	800	1	25.1	85
L3N5938B	34.2	37.8	20.8	38	0.25	850	1	27.4	78
L3N5939B	37.05	40.95	19.2	45	0.25	900	1	29.7	72
L3N5940B	40.85	45.15	17.4	53	0.25	950	1	32.7	65
L3N5941B	44.65	49.35	16.0	67	0.25	1000	1	35.8	60
L3N5942B	48.45	53.55	14.7	70	0.25	1100	1	38.8	55
L3N5943B	53.2	58.8	13.4	86	0.25	1300	1	42.6	50
L3N5944B	58.9	65.1	12.1	100	0.25	1500	1	47.1	45
L3N5945B	64.6	71.4	11.0	120	0.25	1700	1	51.7	41
L3N5946B	71.25	78.8	10.0	140	0.25	2000	1	56	37
L3N5947B	77.9	86.1	9.1	160	0.25	2500	1	62.2	34
L3N5948B	86.45	95.6	8.2	200	0.25	3000	1	69.2	31
L3N5949B	95	105	7.5	250	0.25	3100	1	76	28
L3N5950B	104.5	115.5	6.8	300	0.25	4000	1	83.6	25
L3N5951B	114	126	6.3	380	0.25	4500	1	91.2	23
L3N5952B	123.5	136.5	5.8	450	0.25	5000	1	98.8	22
L3N5953B	142.5	157.5	5.0	600	0.25	6000	1	114	19
L3N5954B	152	168	4.7	700	0.25	6500	1	121.6	18
L3N5955B	171	189	4.2	900	0.25	7000	1	136.8	16
L3N5956B	190	210	3.8	1200	0.25	8000	1	152	14



L3N5923B thru L3N5956B

Surface Mount Zener Diodes
 Vz Range:8.2 to 200V Power Dissipation:3W

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

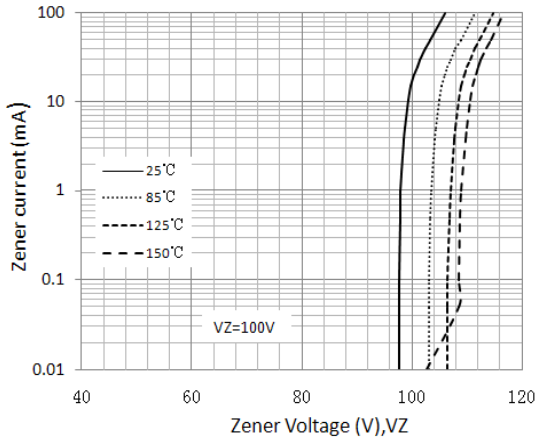


Figure 1. Typical Zener Voltage, Vz=100V

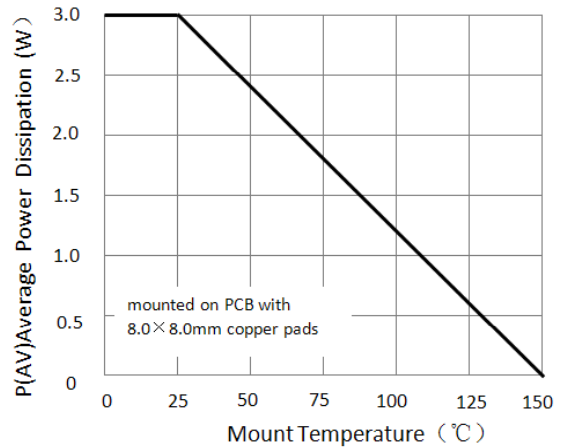


Figure 2. Steady State POWER Derating

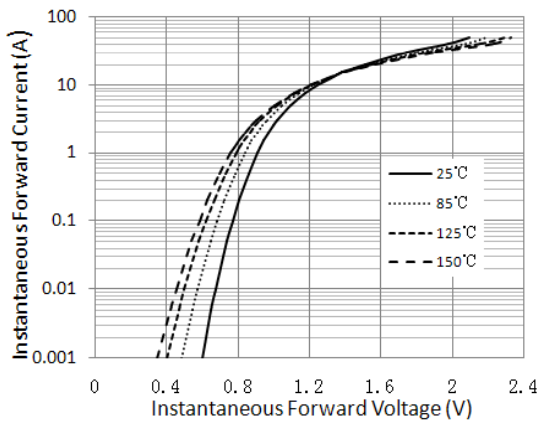


Figure 3. Typical Instantaneous Forward Characteristics

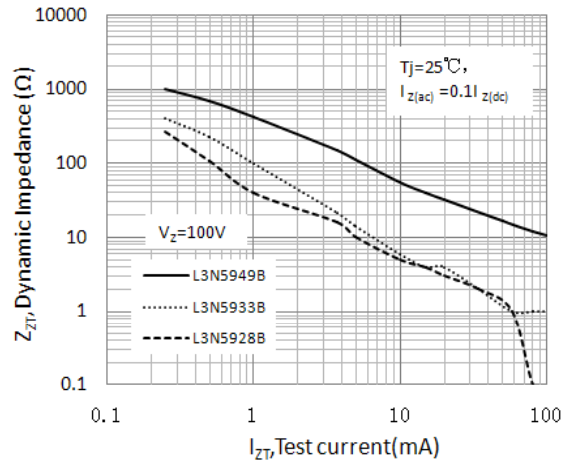


Figure 4. Typical Zener Impedance

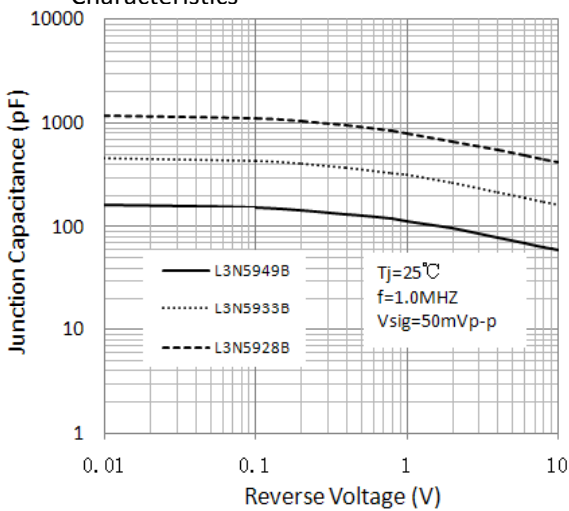


Figure 5. Typical Junction Capacitance

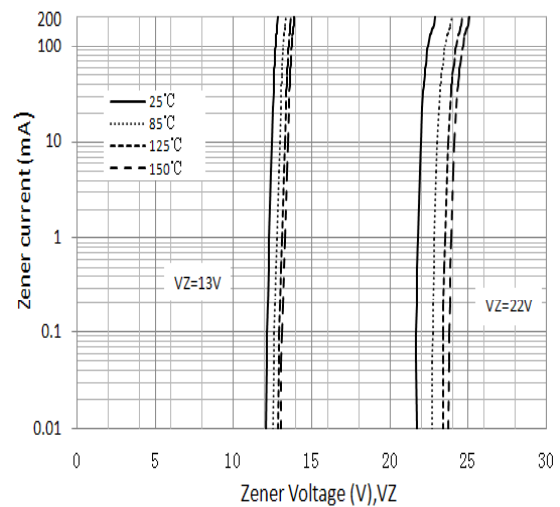
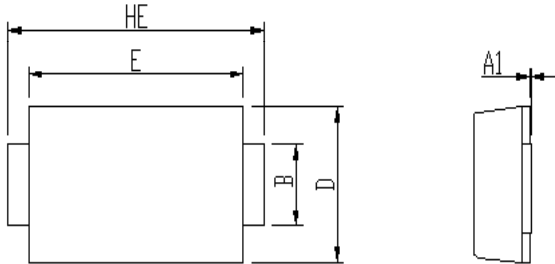


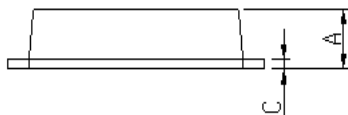
Figure 6. Typical Zener Voltage, Vz=13V / 22V

Package Outline Dimensions

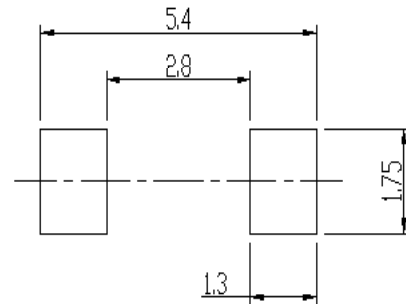
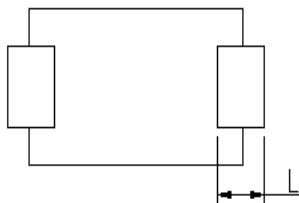
in inches (millimeters)



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

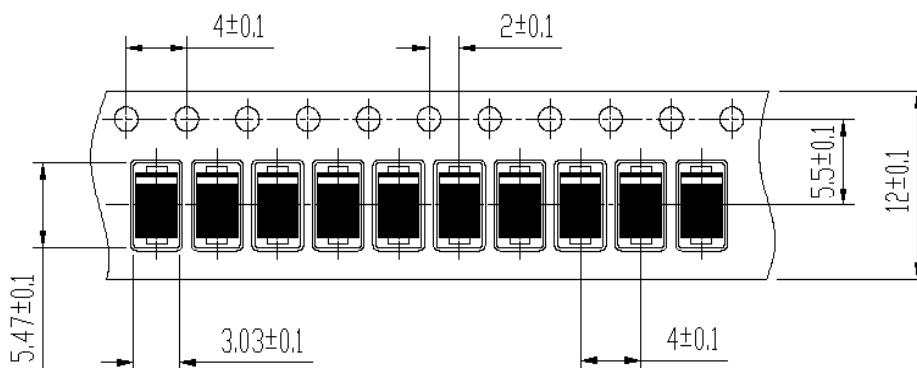


Packing Information

Packing quantities:

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

Tape & Reel Specification





L3N5923B thru L3N5956B

Surface Mount Zener Diodes

Vz Range:8.2 to 200V Power Dissipation:3W

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