

Features

- AEC-Q101 Qualified
- 10 thru 200 Volt Voltage Range
- Glass Passivated Junction
- Surface Mount Application
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

Parameter	Symbol	Rating	Conditions
Steady State Power Dissipation	P_D	1.5W	Note 3
Maximum Forward Voltage	V_F	1.5V	$I_F=200mA$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

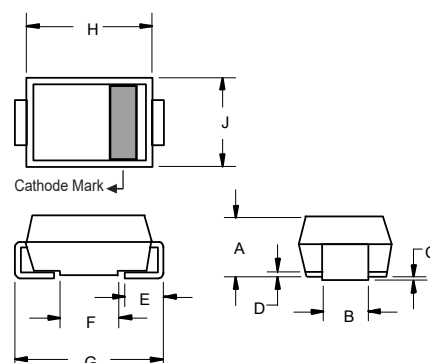
2.High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

3.Mounted On 5.0mm² (1oz Thick) Land Areas.

Lead Temperature at $T_L=75^\circ C$

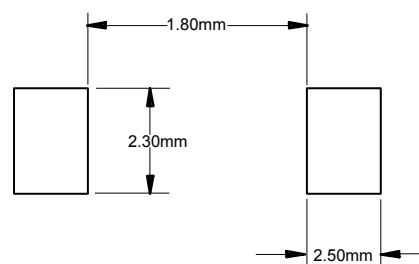
1.5 Watt Surface Mount Silicon Zener Diodes 10V to 200V

SMB (DO-214AA) (LEAD FRAME)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage ⁽⁴⁾	Test Current	Maximum Dynamic Impedance	Knee Current	Knee Impedance	Maximum Reverse Current	Reverse Voltage	Marking Code
	V _Z	I _{ZT}	Z _{ZT} @ I _{ZT}	I _{ZK}	Z _{ZK}	I _R	V _R	
	V	mA	Ω	mA	Ω	μA	V	
SMBJ5925BHE3	10	37.5	4.5	0.25	500	5.0	8.0	925B
SMBJ5926BHE3	11	34.1	5.5	0.25	550	1.0	8.4	926B
SMBJ5927BHE3	12	31.2	6.5	0.25	550	1.0	9.1	927B
SMBJ5928BHE3	13	28.8	7.0	0.25	550	1.0	9.9	928B
SMBJ5929BHE3	15	25.0	9.0	0.25	600	1.0	11.4	929B
SMBJ5930BHE3	16	23.4	10.0	0.25	600	1.0	12.2	930B
SMBJ5931BHE3	18	20.8	12.0	0.25	650	1.0	13.7	931B
SMBJ5932BHE3	20	18.7	14.0	0.25	650	1.0	15.2	932B
SMBJ5933BHE3	22	17.0	17.5	0.25	650	1.0	16.7	933B
SMBJ5934BHE3	24	15.6	19.0	0.25	700	1.0	18.2	934B
SMBJ5935BHE3	27	13.9	23.0	0.25	700	1.0	20.6	935B
SMBJ5936BHE3	30	12.5	28.0	0.25	750	1.0	22.8	936B
SMBJ5937BHE3	33	11.4	33.0	0.25	800	1.0	25.1	937B
SMBJ5938BHE3	36	10.4	38.0	0.25	850	1.0	27.4	938B
SMBJ5939BHE3	39	9.6	45.0	0.25	900	1.0	29.7	939B
SMBJ5940BHE3	43	8.7	53.0	0.25	950	1.0	32.7	940B
SMBJ5941BHE3	47	8.0	67.0	0.25	1000	1.0	35.8	941B
SMBJ5942BHE3	51	7.3	70.0	0.25	1100	1.0	38.8	942B
SMBJ5943BHE3	56	6.7	86.0	0.25	1300	1.0	42.6	943B
SMBJ5944BHE3	62	6.0	100	0.25	1500	1.0	47.1	944B
SMBJ5945BHE3	68	5.5	120	0.25	1700	1.0	51.2	945B
SMBJ5946BHE3	75	5.0	140	0.25	2000	1.0	56.0	946B
SMBJ5947BHE3	82	4.6	160	0.25	2500	1.0	62.2	947B
SMBJ5948BHE3	91	4.1	200	0.25	3000	1.0	69.2	948B
SMBJ5949BHE3	100	3.7	250	0.25	3100	1.0	76.0	949B
SMBJ5950BHE3	110	3.4	300	0.25	4000	1.0	83.6	950B
SMBJ5951BHE3	120	3.1	380	0.25	4500	1.0	91.2	951B
SMBJ5952BHE3	130	2.9	450	0.25	5000	1.0	98.8	952B
SMBJ5953BHE3	150	2.5	600	0.25	6000	1.0	114	953B
SMBJ5954BHE3	160	2.3	700	0.25	6500	1.0	121.6	954B
SMBJ5955BHE3	180	2.1	900	0.25	7000	1.0	136.8	955B
SMBJ5956BHE3	200	1.9	1200	0.25	8000	1.0	152	956B

Note : 4. TOLERANCE AND VOLTAGE DESIGNATION - The Type Numbers Listed Indicate a Tolerance of +/-5%

Curve Characteristics

Fig. 1 - Power Derating Curve

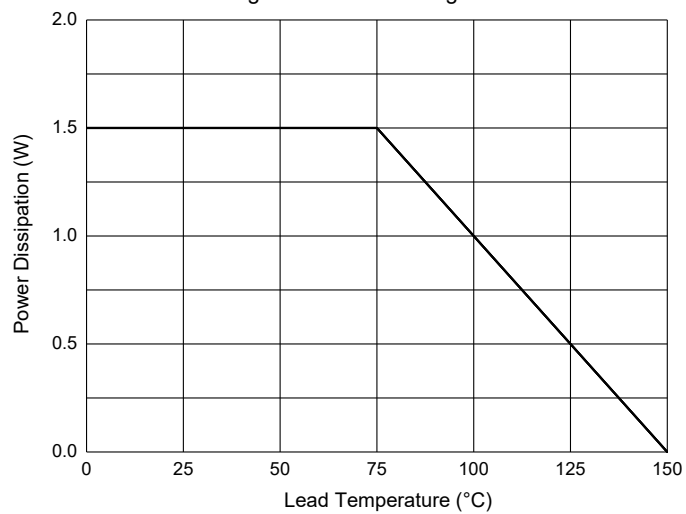
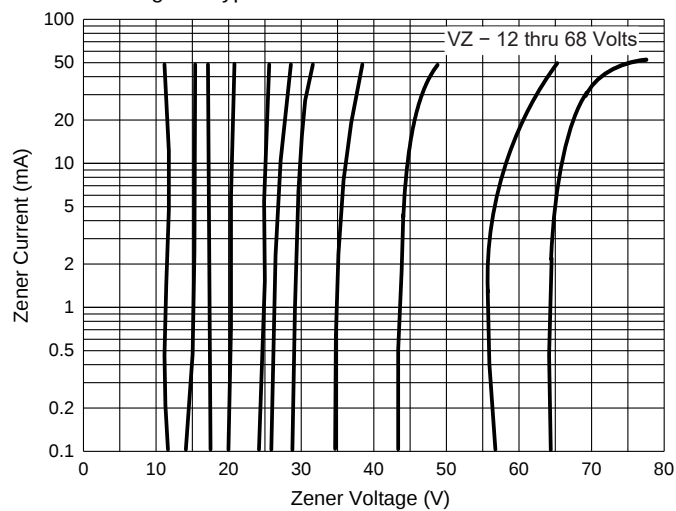


Fig. 2 - Typical Zener Breakdown Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

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<u>SMBJ5930BHE3-TP</u>	<u>SMBJ5931BHE3-TP</u>	<u>SMBJ5932BHE3-TP</u>	<u>SMBJ5933BHE3-TP</u>	<u>SMBJ5934BHE3-TP</u>
<u>SMBJ5935BHE3-TP</u>	<u>SMBJ5936BHE3-TP</u>	<u>SMBJ5937BHE3-TP</u>	<u>SMBJ5938BHE3-TP</u>	<u>SMBJ5939BHE3-TP</u>
<u>SMBJ5940BHE3-TP</u>	<u>SMBJ5941BHE3-TP</u>	<u>SMBJ5942BHE3-TP</u>	<u>SMBJ5943BHE3-TP</u>	<u>SMBJ5944BHE3-TP</u>
<u>SMBJ5945BHE3-TP</u>	<u>SMBJ5946BHE3-TP</u>	<u>SMBJ5947BHE3-TP</u>	<u>SMBJ5948BHE3-TP</u>	<u>SMBJ5949BHE3-TP</u>
<u>SMBJ5950BHE3-TP</u>	<u>SMBJ5951BHE3-TP</u>	<u>SMBJ5952BHE3-TP</u>	<u>SMBJ5953BHE3-TP</u>	<u>SMBJ5954BHE3-TP</u>
<u>SMBJ5955BHE3-TP</u>	<u>SMBJ5956BHE3-TP</u>			