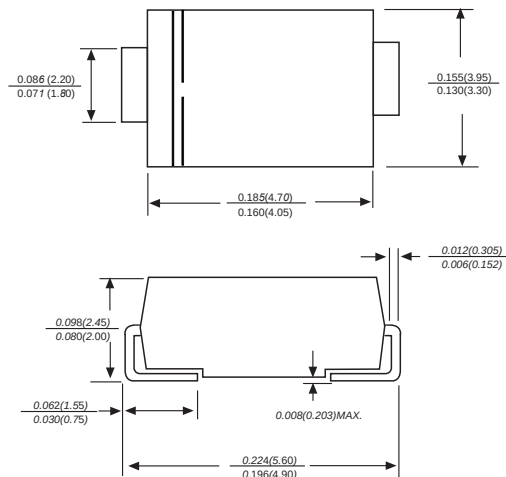


SURFACE MOUNT ZENER DIODE

Features

- ◆ Low Profile Package for Surface Mounting(Flat Handling Surface for Accurate Placement)
- ◆ Zener Voltage 5.1V to 200V
- ◆ Available on Tape and Reel
- ◆ Epoxy Meets UL 94 V-0 Flammability Rating
- ◆ Lead Free Finish/RoHS Compliant

DO-214AA/SMB **RoHS**
COMPLIANT



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC SMB Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750,Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0035ounce, 0.098grams

Maximum Ratings And Electrical Characteristics

Parameter	Symbol	Value	Unit
DC power dissipation at $T_L=75^{\circ}\text{C}$, measure at zero lead length (Note 1) derate above 75°C	P_D	5.0	W
Maximum forward voltage at $I_F=1\text{A}$	V_F	1.2	V
Junction Temperature Range	T_J	- 55 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150	$^{\circ}\text{C}$

Note : (1) T_L =Lead temperature at 3/8" (9.5mm)from body



SMBJ5338B THRU SMBJ5388B

Zener Voltage - 5.1 to 200 Volts Peak Pulse Power - 5.0 W

Ratings And Characteristic Curves

Part Number	Marking	Regulator Voltage	Test Current	Maximum Dynamic Impedance	Maximum Reverse Current	Test Voltage	Maximum Regulator Current	Maximum Dynamic Knee Impedance	Maximum Surge Current	Maximum Voltage Regulation
		V _Z	I _Z	Z _{zT}	I _R	V _R	I _{ZM}	Z _{zk} @1.0mA	I _{ZSM}	
		V	mA	Ω	μA	V	mA	Ω	A	V
SMBJ5338B	338B	5.1	240	1.5	1	1	930	400	14.4	0.39
SMBJ5339B	339B	5.6	220	1	1	2	865	400	13.4	0.25
SMBJ5340B	340B	6	200	1	1	3	790	300	12.7	0.19
SMBJ5341B	341B	6.2	200	1	1	3	765	200	12.4	0.1
SMBJ5342B	342B	6.8	175	1	10	5.2	700	200	11.5	0.15
SMBJ5343B	343B	7.5	175	1.5	10	5.7	630	200	10.7	0.15
SMBJ5344B	344B	8.2	150	1.5	10	6.2	580	200	10	0.2
SMBJ5345B	345B	8.7	150	2	10	6.6	545	200	9.5	0.2
SMBJ5346B	346B	9.1	150	2	7.5	6.9	520	150	9.2	0.22
SMBJ5347B	347B	10	125	2	5	7.6	475	125	8.6	0.22
SMBJ5348B	348B	11	125	2.5	5	8.4	430	125	8	0.25
SMBJ5349B	349B	12	100	2.5	2	9.1	395	125	7.5	0.25
SMBJ5350B	350B	13	100	2.5	1	9.9	365	100	7	0.25
SMBJ5351B	351B	14	100	2.5	1	10.6	340	75	6.7	0.25
SMBJ5352B	352B	15	75	2.5	1	11.5	315	75	6.3	0.25
SMBJ5353B	353B	16	75	2.5	1	12.2	295	75	6	0.3
SMBJ5354B	354B	17	70	2.5	0.5	12.9	280	75	5.8	0.35
SMBJ5355B	355B	18	65	2.5	0.5	13.7	264	75	5.5	0.4
SMBJ5356B	356B	19	65	3	0.5	14.4	250	75	5.3	0.4
SMBJ5357B	357B	20	65	3	0.5	15.2	237	75	5.1	0.4
SMBJ5358B	358B	22	50	3.5	0.5	16.7	216	75	4.7	0.45
SMBJ5359B	359B	24	50	3.5	0.5	18.2	198	100	4.4	0.55
SMBJ5360B	360B	25	50	4	0.5	19	190	110	4.3	0.55
SMBJ5361B	361B	27	50	5	0.5	20.6	176	120	4.1	0.6
SMBJ5362B	362B	28	50	6	0.5	21.2	170	130	3.9	0.6
SMBJ5363B	363B	30	40	8	0.5	22.8	158	140	3.7	0.6
SMBJ5364B	364B	33	40	10	0.5	25.1	144	150	3.5	0.6
SMBJ5365B	365B	36	30	11	0.5	27.4	132	160	3.3	0.65
SMBJ5366B	366B	39	30	14	0.5	29.7	122	170	3.1	0.65
SMBJ5367B	367B	43	30	20	0.5	32.7	110	190	2.8	0.7
SMBJ5368B	368B	47	25	25	0.5	35.8	100	210	2.7	0.8
SMBJ5369B	369B	51	25	27	0.5	38.8	93	230	2.5	0.9
SMBJ5370B	370B	56	20	35	0.5	42.6	86	280	2.3	1
SMBJ5371B	371B	60	20	40	0.5	45.5	79	350	2.2	1.2
SMBJ5372B	372B	62	20	42	0.5	47.1	76	400	2.1	1.35
SMBJ5373B	373B	68	20	44	0.5	51.7	70	500	2	1.5
SMBJ5374B	374B	75	20	45	0.5	56	63	620	1.9	1.6
SMBJ5375B	375B	82	15	65	0.5	62.2	58	720	1.8	1.8
SMBJ5376B	376B	87	15	75	0.5	66	54.5	760	1.7	2
SMBJ5377B	377B	91	15	75	0.5	69.2	52.5	760	1.6	2.2
SMBJ5378B	378B	100	12	90	0.5	76	47.5	800	1.5	2.3
SMBJ5379B	379B	110	12	125	0.5	83.6	43	1000	1.4	2.5
SMBJ5380B	380B	120	10	170	0.5	91.2	39.5	1150	1.3	2.5
SMBJ5381B	381B	130	10	190	0.5	98.8	36.6	1250	1.2	2.5
SMBJ5382B	382B	140	8	230	0.5	106	34	1500	1.2	2.5
SMBJ5383B	383B	150	8	330	0.5	114	31.6	1500	1.1	3
SMBJ5384B	384B	160	8	350	0.5	122	29.4	1650	1.1	3
SMBJ5385B	385B	170	8	380	0.5	129	28	1750	1	3
SMBJ5386B	386B	180	5	430	0.5	137	26.4	1750	1	4
SMBJ5387B	387B	190	5	450	0.5	144	25	1850	0.9	5
SMBJ5388B	388B	200	5	480	0.5	152	23.6	1850	0.9	5

Ratings And Characteristic Curves

Fig. 1 - Power Derating Curve

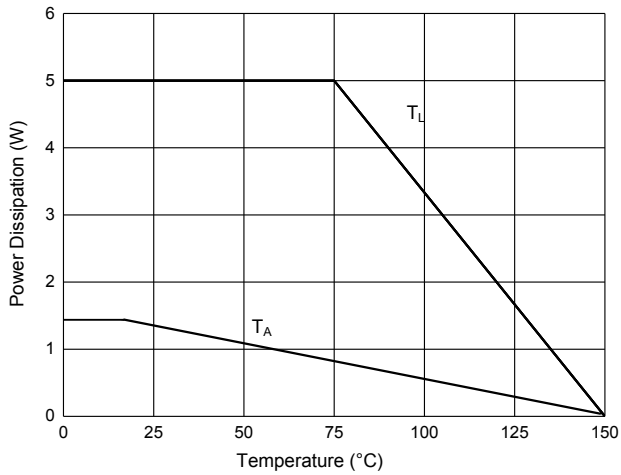


Fig. 2 - Typical Zener Breakdown Characteristics

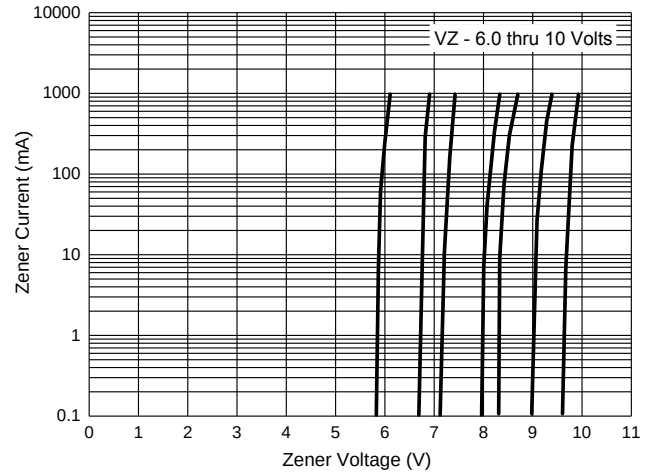


Fig. 3 - Typical Zener Breakdown Characteristics

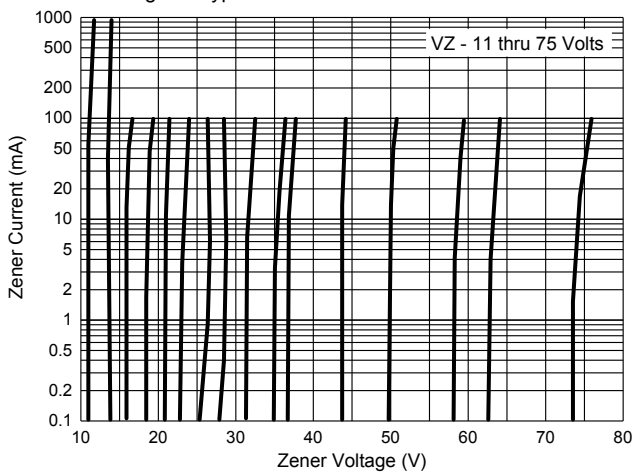
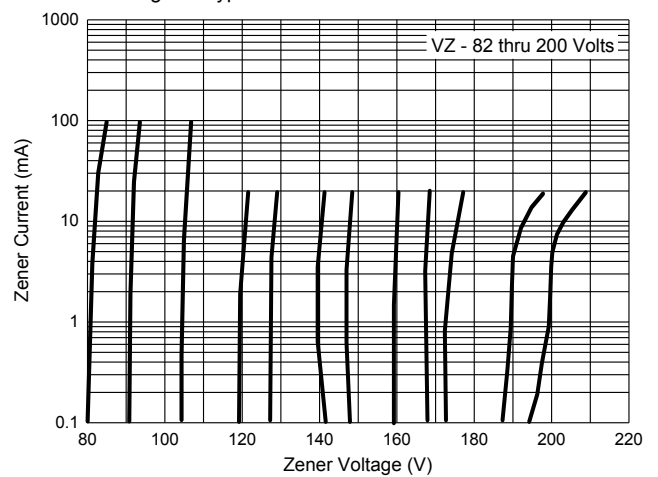


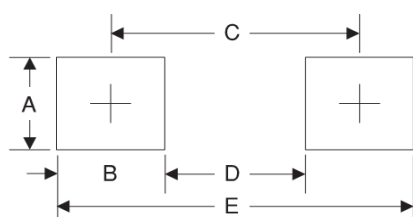
Fig. 4 - Typical Zener Breakdown Characteristics



Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	BOX (pcs)	INNERBOX (mm)	REEL DIA, (mm)	CARTON SIZE (mm)	CARTON (pcs)
SMB	13"	3,000	6,000	340*350*47	330	370*370*370	48,000

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	2.8	0.110
B	2.4	0.094
C	4.6	0.181
D	2.2	0.086
E	7.0	0.276

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