



V_Z : 3.3 - 200 Volts
P_D : 5 Watts

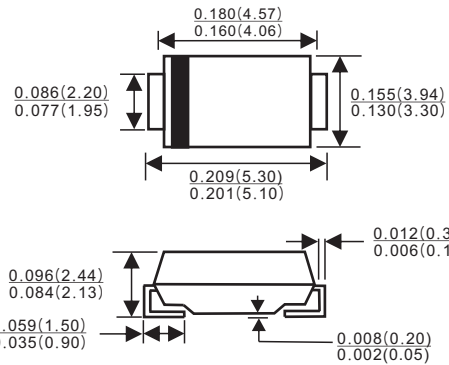
SMB/DO-214AA

Features

- ✧ Complete Voltage Range 3.3 to 200 Volts
- ✧ High peak reverse power dissipation
- ✧ High reliability
- ✧ Low leakage current
- ✧ Pb / RoHS Free

Mechanical Data

- ✧ Case : SMB (DO-214AA) Molded plastic
- ✧ Epoxy : UL94V-O rate flame retardant
- ✧ Lead : Lead formed for Surface mount
- ✧ Polarity : Color band denotes cathode end
- ✧ Mounting position : Any
- ✧ Weight : 0.093 gram



Dimensions in inches and(millimeters)

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Power Dissipation at T _L = 25 °C	P _D	5	W
Maximum Forward Voltage at I _F = 1.0 A	V _F	1.2	V
Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	90	°C/W
Thermal Resistance, Junction to Lead (Note 1)	R _{θJL}	25	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150	°C

Note :

- (1) When mounted on FR4 PC board (1 oz Cu) with recommended footprint.

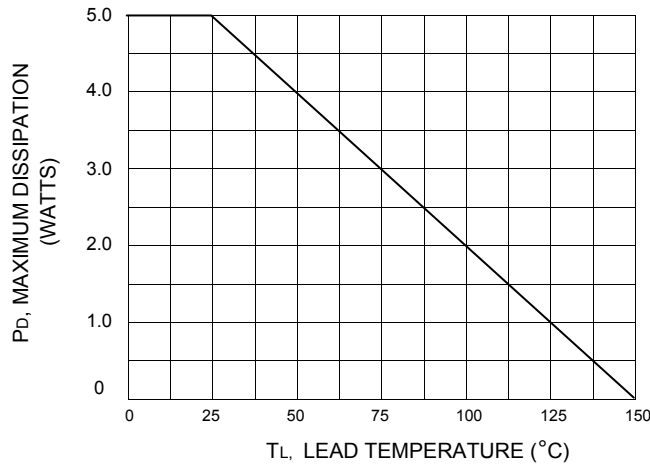
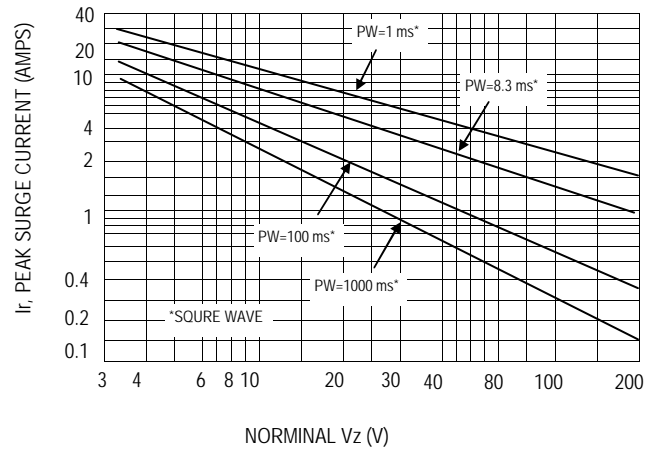
ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Microsemi Part Number		Regulator Voltage (V _Z)	Test Current (I _{ZT})	Maximum Dynamic Impedance (Z _Z) (A&B Suffix)	Maximum Reverse Current (I _R) @ V _R	I _R Test Voltage (V _R) (Non-Suffix & A Suffix)	I _R Test Voltage (V _R) (B,C,D Suffix)	Maximum Regulator Current (I _{ZM}) (B,C,D Suffix)	Maximum Dynamic Knee Impedance Z _{zk} @ 1.0 mA (A,B,C,D Suffix)	Maximum Surge Current (I _{ZSM})	Maximum Voltage Regulation (ΔV _Z) (A,B,C,D Suffix)
TYPE	MARKING	V	mAdc	OHMS	μA	V	V	mA	OHMS	AMPS	VOLTS
SMBJ5333B	333B	3.3	380	3.0	300	1.0	1.0	1440	400	20	0.85
SMBJ5334B	334B	3.6	350	2.5	150	1.0	1.0	1320	500	18.7	0.80
SMBJ5335B	335B	3.9	320	2.0	50	1.0	1.0	1220	500	17.6	0.54
SMBJ5336B	336B	4.3	290	2.0	10	1.0	1.0	1100	500	16.4	0.49
SMBJ5337B	337B	4.7	260	2.0	5.0	1.0	1.0	1010	450	15.3	0.44
SMBJ5338B	338B	5.1	240	1.5	1.0	1.0	1.0	930	400	14.4	0.39
SMBJ5339B	339B	5.6	220	1.0	1.0	2.0	2.0	865	400	13.4	0.25
SMBJ5340B	340B	6.0	200	1.0	1.0	3.0	3.0	790	300	12.7	0.19
SMBJ5341B	341B	6.2	200	1.0	1.0	3.0	3.0	765	200	12.4	0.10
SMBJ5342B	342B	6.8	175	1.0	10	4.9	5.2	700	200	11.5	0.15
SMBJ5343B	343B	7.5	175	1.5	10	6.4	5.7	630	200	10.7	0.15
SMBJ5344B	344B	8.2	150	1.5	10	6.9	6.2	580	200	10	0.20
SMBJ5345B	345B	8.7	150	2.0	10	6.25	6.6	545	200	9.5	0.20
SMBJ5346B	346B	9.1	150	2.0	7.5	6.6	6.9	520	150	9.2	0.22
SMBJ5347B	347B	10	125	2.0	5.0	7.2	7.6	475	125	8.6	0.22
SMBJ5348B	348B	11	125	2.5	5.0	8.0	8.4	430	125	8.0	0.25
SMBJ5349B	349B	12	100	2.5	2.0	8.6	9.1	395	125	7.5	0.25
SMBJ5350B	350B	13	100	2.5	1.0	9.4	9.9	265	100	7.0	0.25
SMBJ5351B	351B	14	100	2.5	1.0	10.1	10.6	340	75	6.7	0.25
SMBJ5352B	352B	15	75	2.5	1.0	10.8	11.5	315	75	6.3	0.25
SMBJ5353B	353B	16	75	2.5	1.0	11.5	12.2	295	75	6.0	0.30
SMBJ5354B	354B	17	70	2.5	0.5	12.2	12.3	280	75	5.8	0.35
SMBJ5355B	355B	18	65	2.5	0.5	13	13.7	264	75	5.5	0.40
SMBJ5356B	356B	19	65	3.0	0.5	13.7	14.4	250	75	5.3	0.40
SMBJ5357B	357B	20	65	3.0	0.5	14.4	15.2	237	75	5.1	0.40
SMBJ5358B	358B	22	50	3.5	0.5	15.8	16.7	216	75	4.7	0.45
SMBJ5359B	359B	24	50	3.5	0.5	17.3	18.2	198	100	4.4	0.55
SMBJ5360B	360B	25	50	4.0	0.5	18	19	190	110	4.3	0.55
SMBJ5361B	361B	27	50	5.0	0.5	19.4	20.6	176	120	4.1	0.60
SMBJ5362B	362B	28	50	6.0	0.5	20.1	21.2	170	130	3.9	0.60
SMBJ5363B	363B	30	40	8.0	0.5	21.6	22.8	158	140	3.7	0.60
SMBJ5364B	364B	33	40	10	0.5	23.8	25.1	144	150	3.5	0.63
SMBJ5365B	365B	36	30	11	0.5	25.9	27.4	132	160	3.3	0.65
SMBJ5366B	366B	39	30	14	0.5	28.1	29.7	122	170	3.1	0.65
SMBJ5367B	367B	43	30	20	0.5	31	32.7	110	190	2.8	0.70
SMBJ5368B	368B	47	25	25	0.5	33.8	35.8	100	210	2.7	0.80
SMBJ5369B	369B	51	25	27	0.5	36.7	38.8	93	230	2.5	0.90
SMBJ5370B	370B	56	20	35	0.5	40.3	42.5	86	280	2.3	1.00
SMBJ5371B	371B	60	20	40	0.5	43	45.5	79	350	2.2	1.20
SMBJ5372B	372B	62	20	42	0.5	44.6	47.1	76	400	2.1	1.35
SMBJ5373B	373B	68	20	44	0.5	49	51.7	70	500	2.0	1.50
SMBJ5374B	374B	75	20	45	0.5	54	56	63	620	1.9	1.60
SMBJ5375B	375B	82	15	65	0.5	59	62.2	58	720	1.8	1.80
SMBJ5376B	376B	87	15	75	0.5	63	66	54.5	760	1.7	2.00
SMBJ5377B	377B	91	15	75	0.5	65.5	69.2	52.5	760	1.6	2.20
SMBJ5378B	378B	100	12	90	0.5	72	76	47.5	800	1.5	2.30
SMBJ5379B	379B	110	12	125	0.5	79.2	83.6	43	1000	1.4	2.50
SMBJ5380B	380B	120	10	170	0.5	86.4	91.2	39.5	1150	1.3	2.50
SMBJ5381B	381B	130	10	190	0.5	93.6	93.8	36.6	1250	1.2	2.50
SMBJ5382B	382B	140	8.0	230	0.5	101	106	34	1500	1.2	2.50
SMBJ5383B	383B	150	8.0	330	0.5	108	114	31.5	1500	1.1	3.00
SMBJ5384B	384B	160	8.0	350	0.5	115	122	29.4	1660	1.1	3.00
SMBJ5385B	385B	170	8.0	380	0.5	122	129	28	1750	1.0	3.00
SMBJ5386B	386B	180	5.0	430	0.5	130	137	26.4	1750	1.0	4.00
SMBJ5387B	387B	190	5.0	450	0.5	137	144	25	1850	0.9	5.00
SMBJ5388B	388B	200	5.0	480	0.5	144	152	23.6	1850	0.9	5.00

Notes : (1) Suffix " B " indicates ± 5% tolerance, suffix " A " indicates ± 10% tolerance.

(2) The surge current (I_{ZSM}) is specified as the maximum peak of a non- recurrent half-sin wave of 8.3 ms duration.

(3) Voltage regulation (V_Z) is the difference between the voltage measured at 10% and 50% of I_{ZM}

RATING AND CHARACTERISTIC CURVES (SMBJ5333B - SMBJ5388B)
Fig. 1 POWER DERATING CURVE

Fig.2 Maximum Non-Repetitive Surg Current versus Nominal Zener Voltage


PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00