



SMC5333B-SMC5378B

ZENER 5W SERIES

SMC5333B - SMC5378B

V_Z :3.3 - 100 Volts

P_D : 5 Watt

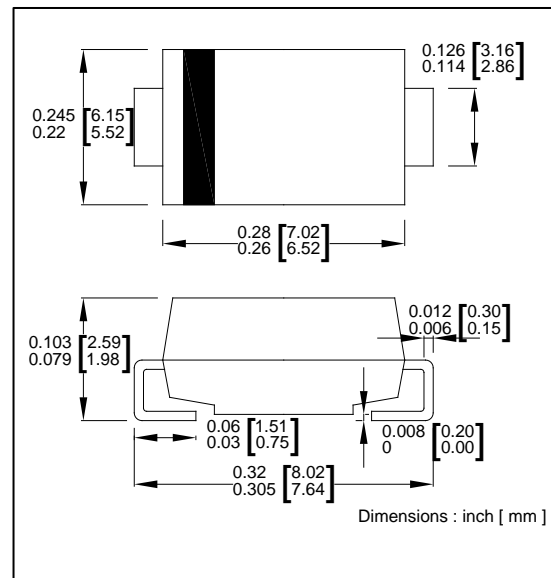
FEATURES

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free component
- For use in stabilizing and clipping circuits with high power rating

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

SMC /DO214AB



RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	Value	UNIT
DC Power Dissipation at $T_L = 75^\circ\text{C}$ (Note1)	P_D	5.0	Watts
Peak pulse current with a 10/1000 μs waveform	V_F	1.2	Volts
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.



Ratings And Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

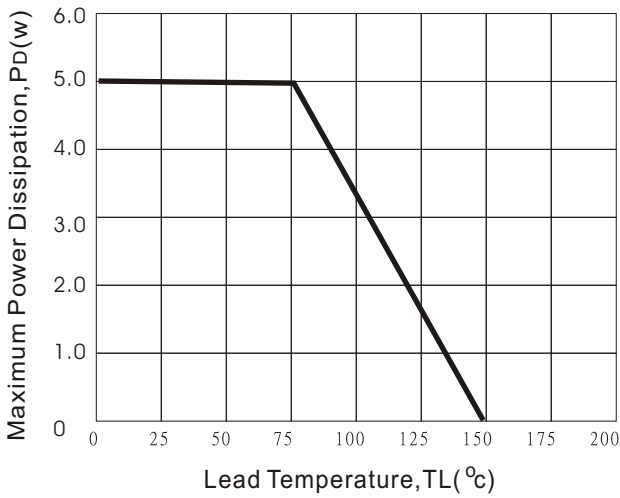


Fig1-Power Temperature Derating Curve

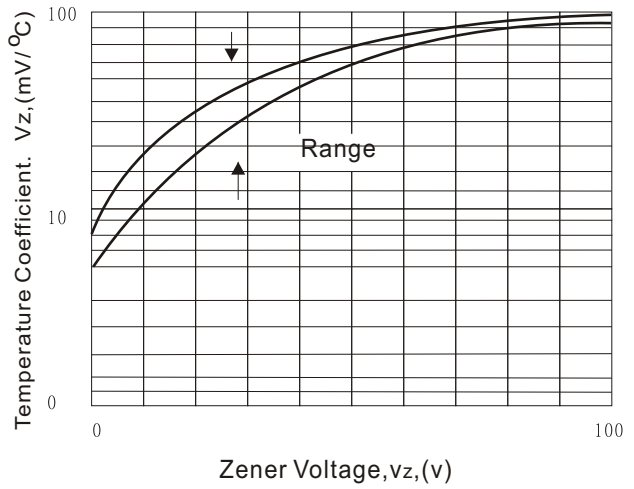


Fig.2- Temperature Coefficients v.s. Zener Voltage

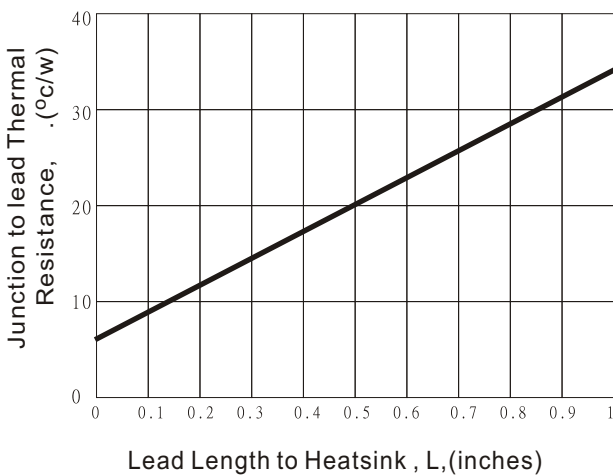


Fig.3 -Typical Thermal Resistance v.s Lead Length

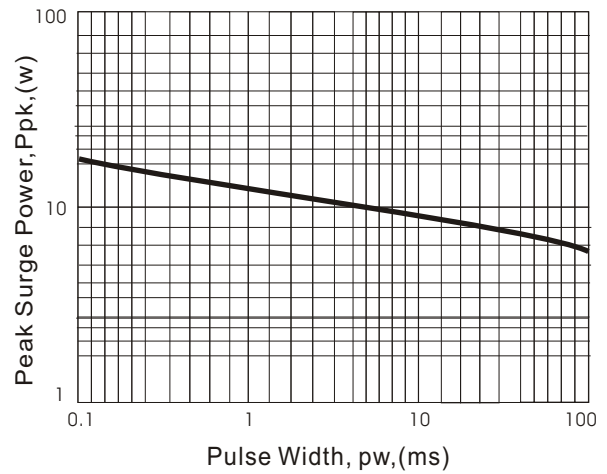


Fig. 4 -Maximum Surge Power

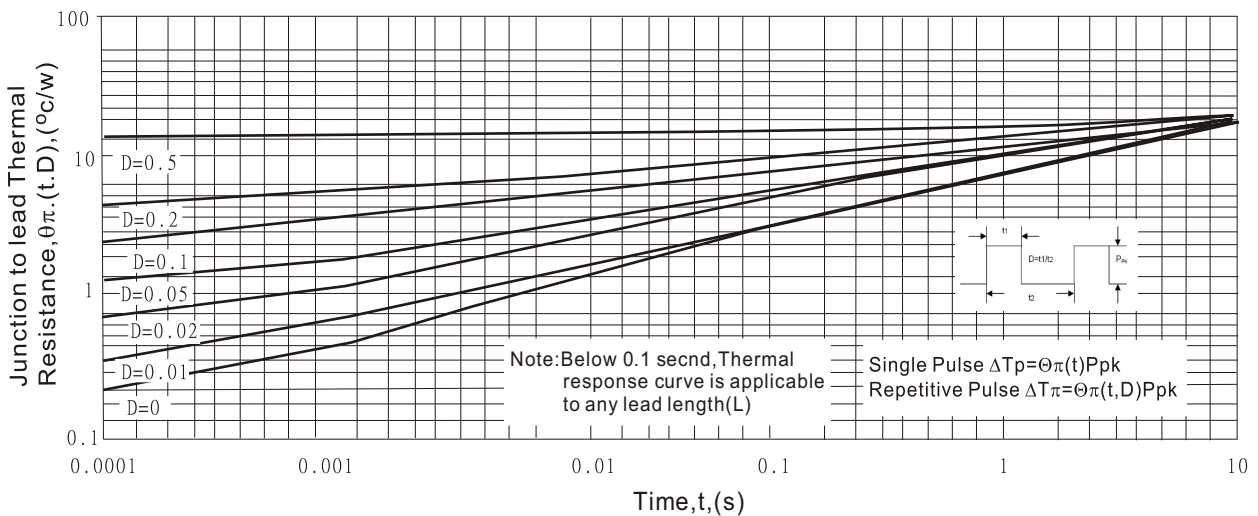


Fig.5 - Typical Thermal Response L, Lead Length=3/8inch



Electrical Characteristics(TA=25°C unless otherwise noted)

ZENER 5W SERIES	DEVICE MARKING CODE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		Vz @ IZT	IZT	ZZT @ IZT	Zzk @ Izk	Izk	IR @ VR		IZM
		(V)	(mA)	(Ω)	(Ω)	(mA)	(uA)	(V)	(mA)
SMC5333B	333B	3.3	380	3.0	400	1.00	300	1.0	1437
SMC5334B	334B	3.6	350	2.5	500	1.00	150	1.0	1317
SMC5335B	335B	3.9	320	2.0	500	1.00	50	1.0	1216
SMC5336B	336B	4.3	290	2.0	500	1.00	10.0	1.0	1103
SMC5337B	337B	4.7	260	2.0	450	1.00	5.0	1.0	1009
SMC5338B	338B	5.1	240	1.5	400	1.00	1.0	1.0	930
SMC5339B	339B	5.6	220	1.0	400	1.00	1.0	2.0	846
SMC5340B	340B	6.0	200	1.0	300	1.00	1.0	3.0	790
SMC5341B	341B	6.2	200	1.0	200	1.00	1.0	3.0	765
SMC5342B	342B	6.8	175.0	1.0	200	1.00	10.0	5.2	700
SMC5343B	343B	7.5	175.0	1.5	200	1.00	10.0	5.7	630
SMC5344B	344B	8.2	150.0	1.5	200	1.00	10.0	6.2	580
SMC5345B	345B	8.7	150.0	2.0	200	1.00	7.5	6.6	545
SMC5346B	346B	9.1	150.0	2.0	150	1.00	5.0	6.9	520
SMC5347B	347B	10.0	125.0	2.0	125	1.00	5.0	7.6	475
SMC5348B	348B	11.0	125.0	2.5	125	1.00	5.0	8.4	430
SMC5349B	349B	12.0	100.0	2.5	125	1.00	2.0	9.1	395
SMC5350B	350B	13.0	100.0	2.5	100	1.00	1.0	9.9	365
SMC5351B	351B	14.0	100.0	2.5	75	1.00	1.0	10.6	340
SMC5352B	352B	15.0	75.0	2.5	75	1.00	1.0	11.5	315
SMC5353B	353B	16.0	75.0	2.5	75	1.00	1.0	12.2	295
SMC5354B	354B	17.0	70.0	2.5	75	1.00	0.5	12.9	280
SMC5355B	355B	18.0	65.0	2.5	75	1.00	0.5	13.7	265
SMC5356B	356B	19.0	65.0	3	75	1.00	0.5	14.4	250
SMC5357B	357B	20.0	65.0	3	75	1.00	0.5	15.2	237
SMC5358B	358B	22.0	50.0	4	75	1.00	0.5	16.7	216
SMC5359B	359B	24.0	50.0	4	100	1.00	0.5	18.2	198
SMC5360B	360B	25.0	50.0	4	110	1.00	0.5	19.0	190
SMC5361B	361B	27.0	50.0	5	120	1.00	0.5	20.6	176
SMC5362B	362B	28.0	50.0	6	130	1.00	0.5	21.2	170
SMC5363B	363B	30.0	40.0	8	140	1.00	0.5	22.8	158
SMC5364B	364B	33.0	40.0	10	150	1.00	0.5	25.1	144
SMC5365B	365B	36.0	30.0	11	160	1.00	0.5	27.4	132
SMC5366B	366B	39.0	30.0	14	170	1.00	0.5	29.7	122
SMC5367B	367B	43.0	30.0	20	190	1.00	0.5	32.7	110
SMC5368B	368B	47.0	25.0	25	210	1.00	0.5	35.8	100
SMC5369B	369B	51.0	25.0	27	230	1.00	0.5	38.8	93
SMC5370B	370B	56.0	20.0	35	280	1.00	0.5	42.6	86
SMC5371B	371B	60.0	20.0	40	350	1.00	0.5	42.5	79
SMC5372B	372B	62.0	20.0	42	400	1.00	0.5	47.1	76
SMC5373B	373B	68.0	20.0	44	500	1.00	0.5	51.7	70
SMC5374B	374B	75.0	20.0	45	620	1.00	0.5	56.0	63
SMC5375B	375B	82.0	15.0	65	720	1.00	0.5	62.2	58
SMC5376B	376B	87.0	15.0	75	760	1.00	0.5	66.0	54.5
SMC5377B	377B	91.0	15.0	75	760	1.00	0.5	69.2	52.5
SMC5378B	378B	100.0	12.0	90	800	1.00	0.5	76.0	47.5

NOTES:

- (1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5%.
- (2) The reverse surge current is a non-repetitive,8.3ms pulse width square wave or equivalent sine-wave superimposed. superimposed on IZT per JEDEC Method