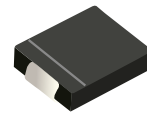
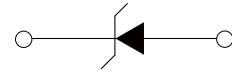


FEATURES

- | 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



DO-214AB(SMC)



Schematic Symbol

MECHANICAL DATA

- | Case : Molded plastic body
- | Polarity : Polarity symbol marking on body
- | Mounting Position : Any

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
DC Power dissipation at $T_L=75^{\circ}\text{C}^{(1)}$	P_D	5.0	W
Maximum forward voltage@ $I_F=1\text{A}$	V_F	1.2	V
Maximum junction temperature	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

ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	Regulator Voltage	Test current	Maximum Dynamic Impedance	Maximum Reverse Current	Test Voltage	Maximum Reverse Current	Maximum Dynamic Knee Impedance	Maximum Surge Current	Maximum Voltage Regulation
		V_Z (V)	I_{ZT} (mA)	Z_{ZT} (Ω)	I_R (μ A)	V_R (V)	I_{ZM} (mA)	$Z_{ZK}@1.0mA$ (Ω)	I_{ZSM} (A)	(V)
SMC5338B	5338B	5.1	240	1.5	1	1	930	400	14.4	0.39
SMC5339B	5339B	5.6	220	1	1	2	865	400	13.4	0.25
SMC5340B	5340B	6	200	1	1	3	790	300	12.7	0.19
SMC5341B	5341B	6.2	200	1	1	3	765	200	12.4	0.1
SMC5342B	5342B	6.8	175	1	10	5.2	700	200	11.5	0.15
SMC5343B	5343B	7.5	175	1.5	10	5.7	630	200	10.7	0.15
SMC5344B	5344B	8.2	150	1.5	10	6.2	580	200	10	0.2
SMC5345B	5345B	8.7	150	2	10	6.6	545	200	9.5	0.2
SMC5346B	5346B	9.1	150	2	7.5	6.9	520	150	9.2	0.22
SMC5347B	5347B	10	125	2	5	7.6	475	125	8.6	0.22
SMC5348B	5348B	11	125	2.5	5	8.4	430	125	8	0.25
SMC5349B	5349B	12	100	2.5	2	9.1	395	125	7.5	0.25
SMC5350B	5350B	13	100	2.5	1	9.9	365	100	7	0.25
SMC5351B	5351B	14	100	2.5	1	10.6	340	75	6.7	0.25
SMC5352B	5352B	15	75	2.5	1	11.5	315	75	6.3	0.25
SMC5353B	5353B	16	75	2.5	1	12.2	295	75	6	0.3
SMC5354B	5354B	17	70	2.5	0.5	12.9	280	75	5.8	0.35
SMC5355B	5355B	18	65	2.5	0.5	13.7	264	75	5.5	0.4
SMC5356B	5356B	19	65	3	0.5	14.4	250	75	5.3	0.4
SMC5357B	5357B	20	65	3	0.5	15.2	237	75	5.1	0.4
SMC5358B	5358B	22	50	3.5	0.5	16.7	216	75	4.7	0.45
SMC5359B	5359B	24	50	3.5	0.5	18.2	198	100	4.4	0.55
SMC5360B	5360B	25	50	4	0.5	19	190	110	4.3	0.55
SMC5361B	5361B	27	50	5	0.5	20.6	176	120	4.1	0.6
SMC5362B	5362B	28	50	6	0.5	21.2	170	130	3.9	0.6
SMC5363B	5363B	30	40	8	0.5	22.8	158	140	3.7	0.6
SMC5364B	5364B	33	40	10	0.5	25.1	144	150	3.5	0.6
SMC5365B	5365B	36	30	11	0.5	27.4	132	160	3.3	0.65
SMC5366B	5366B	39	30	14	0.5	29.7	122	170	3.1	0.65
SMC5367B	5367B	43	30	20	0.5	32.7	110	190	2.8	0.7

Part Number	Device Marking Code	Regulator Voltage	Test current	Maximum Dynamic Impedance	Maximum Reverse Current	Test Voltage	Maximum Reverse Current	Maximum Dynamic Knee Impedance	Maximum Surge Current	Maximum Voltage Regulation
		V _Z (V)	I _{ZT} (mA)	Z _{ZT} (Ω)	I _R (μA)	V _R (V)	I _{ZM} (mA)	Z _{ZK} @1.0mA (Ω)	I _{ZSM} (A)	(V)
SMC5368B	5368B	47	25	25	0.5	35.8	100	210	2.7	0.8
SMC5369B	5369B	51	25	27	0.5	38.8	93	230	2.5	0.9
SMC5370B	5370B	56	20	35	0.5	42.6	86	280	2.3	1
SMC5371B	5371B	60	20	40	0.5	45.5	79	350	2.2	1.2
SMC5372B	5372B	62	20	42	0.5	47.1	76	400	2.1	1.35
SMC5373B	5373B	68	20	44	0.5	51.7	70	500	2	1.5
SMC5374B	5374B	75	20	45	0.5	56	63	620	1.9	1.6
SMC5375B	5375B	82	15	65	0.5	62.2	58	720	1.8	1.8
SMC5376B	5376B	87	15	75	0.5	66	54.5	760	1.7	2
SMC5377B	5377B	91	15	75	0.5	69.2	52.5	760	1.6	2.2
SMC5378B	5378B	100	12	90	0.5	76	47.5	800	1.5	2.3
SMC5379B	5379B	110	12	125	0.5	83.6	43	1000	1.4	2.5
SMC5380B	5380B	120	10	170	0.5	91.2	39.5	1150	1.3	2.5
SMC5381B	5381B	130	10	190	0.5	98.8	36.6	1250	1.2	2.5
SMC5382B	5382B	140	8.0	230	0.5	106	34	1500	1.2	2.5
SMC5383B	5383B	150	8.0	330	0.5	114	31.6	1500	1.1	3
SMC5384B	5384B	160	8.0	350	0.5	122	29.4	1650	1.1	3
SMC5385B	5385B	170	8.0	380	0.5	129	28	1750	1.0	3
SMC5386B	5386B	180	5.0	430	0.5	137	26.4	1750	1.0	4
SMC5387B	5387B	190	5.0	450	0.5	144	25	1850	0.9	5
SMC5388B	5388B	200	5.0	480	0.5	152	23.6	1850	0.9	5

Remarks:

 1. Devices Listed Have a $\pm 5\%$ Tolerance on Nominal VZ. Suffix C Denotes a +2%

CHARACTERISTIC CURVES

Fig.1-Power Derating Curve

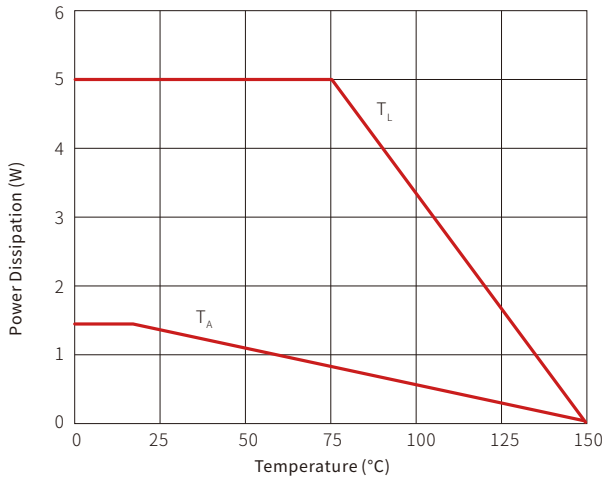


Fig.2-Typical Zener Breakdown Characteristics

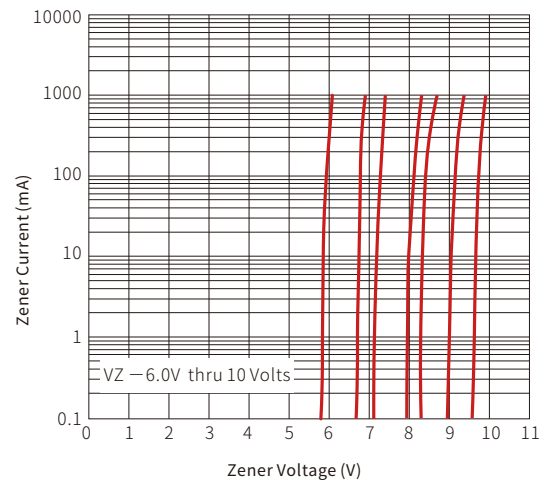


Fig.3-Typical Zener Breakdown Characteristics

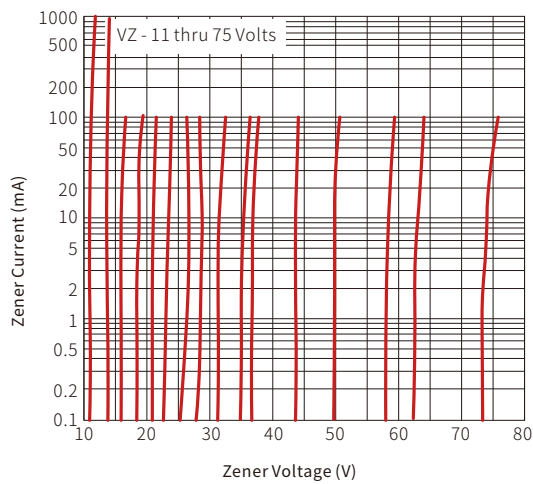
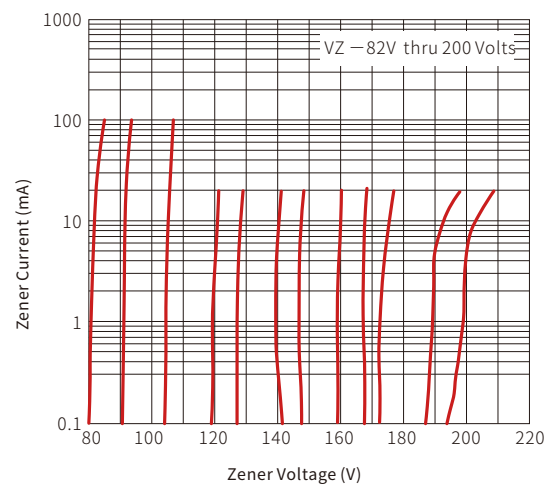
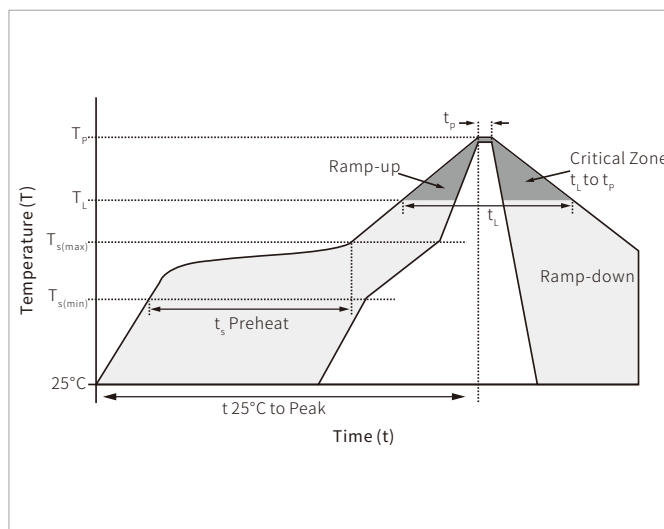


Fig.4-Typical Zener Breakdown Characteristics

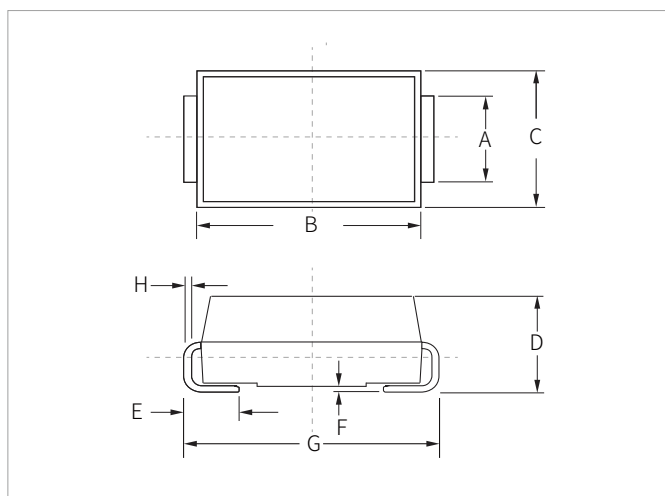


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

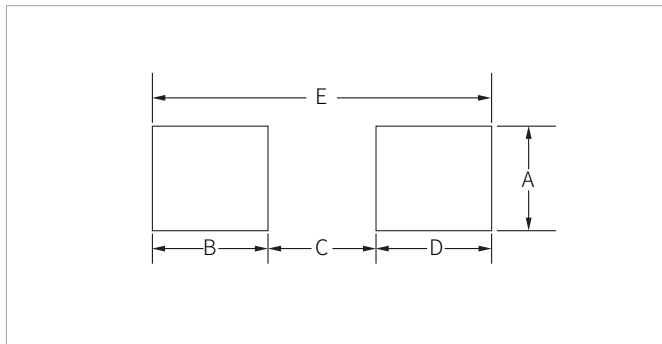


DO-214AB(SMC) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.20	0.110	0.126
B	6.60	7.20	0.260	0.283
C	5.70	6.10	0.224	0.240
D	2.15	2.75	0.085	0.108
E	1.00	1.60	0.039	0.063
F	0.02	0.20	0.000	0.008
G	7.60	8.00	0.299	0.315
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	-	0.129	-
B	2.40	-	0.094	-
C	-	4.20	-	0.165
D	2.40	-	0.094	-
E	8.20REF		0.323REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SMC53xxB	DO-214AB(SMC)	3000PCS	13"

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.