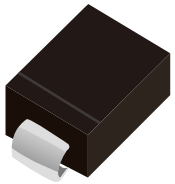
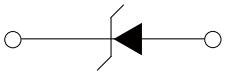
FEATURES

- For Surface Mounted Applications
- Built-in Strain Relief,ideal For Automated Placement
- Low Reverse Leakage
- High Forward Surge Current Capability



DO-214AA(SMB)



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°C)

Parameter		Symbol	SS52B	SS54B	SS545B	SS56B	SS58B	SS510B	SS515B	SS520B	Unit
Marking			SS52	SS54	SS545	SS56	SS58	SS510	SS515	SS520	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	45	60	80	100	150	200	V
Maximum RMS Voltage		V_{RMS}	14	28	31.5	42	56	70	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current at T_L=100°C		$I_{(AV)}$	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed On Rated Load		I_{FSM}	120.0								A
Maximum Instantaneous Forward Voltage at 5.0A		V_F	0.55			0.70	0.85		0.95		V
Maximum DC Reverse Current	T_A =25°C	I_R	0.2				0.05				mA
	T_A =100°C		10				5				mA
Typical Thermal Resistance		$R_{\theta JA}$	60.0								°C/W
Operating Junction Temperature Range		T_J	-55 to +150								°C
Storage Temperature Range		T_{STG}	-55 to +150								°C

CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

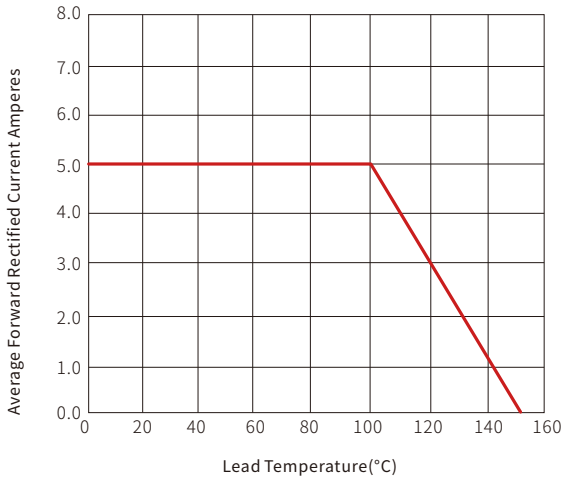


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

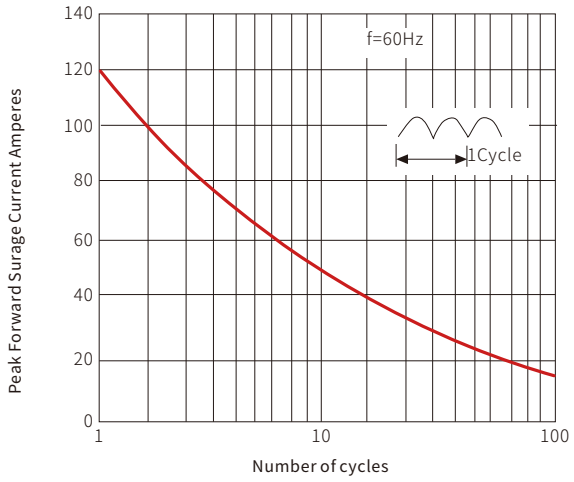


Fig. 3-Typical Forward Voltage Characteristics

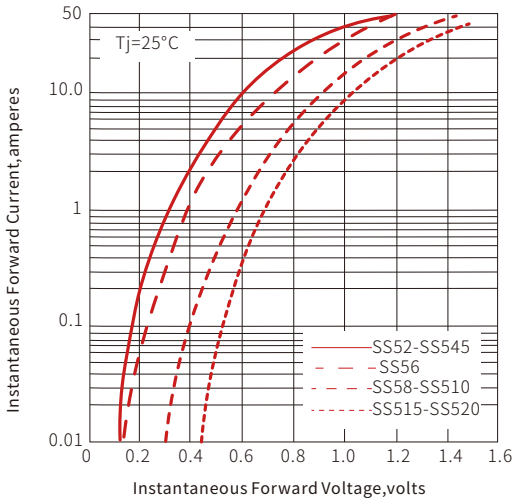
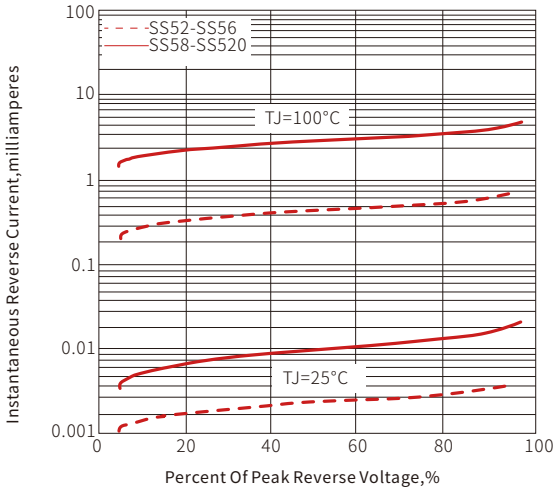
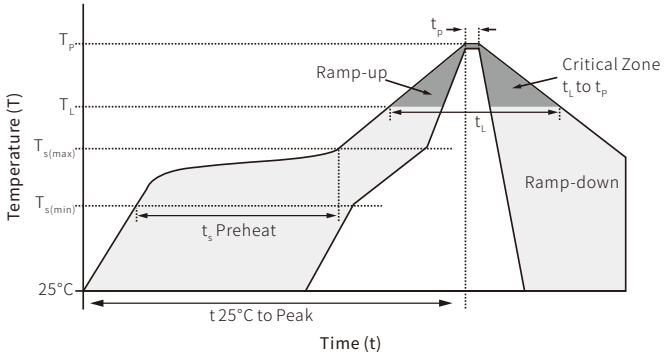


Fig. 4-Typical Reverse Leakage Characteristics

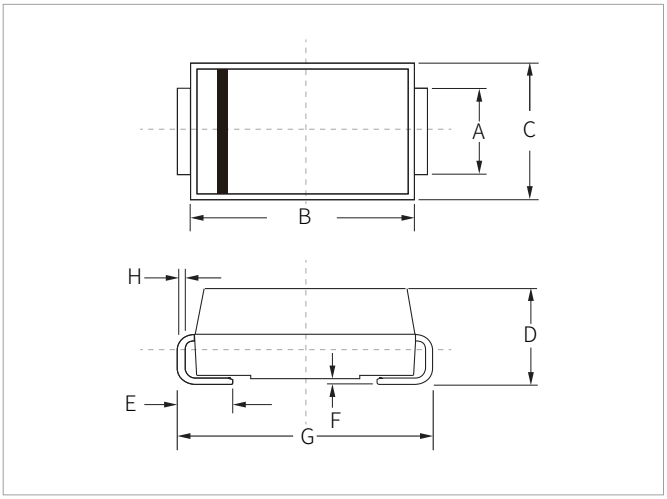


SOLDERING PARAMETERS

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

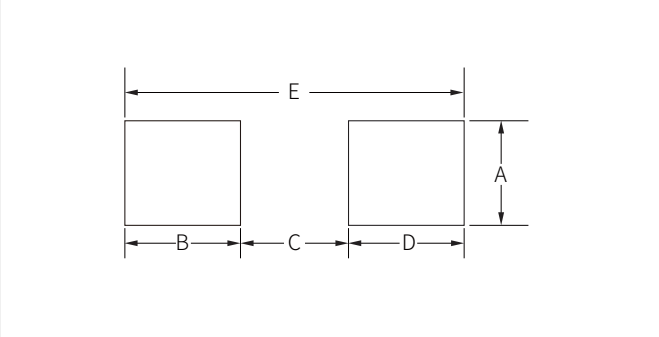


DO-214AA(SMB) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.80	2.20	0.071	0.087
B	4.30	4.70	0.170	0.185
C	3.40	3.90	0.134	0.153
D	2.15	2.75	0.085	0.108
E	1.00	1.50	0.039	0.059
F	0.02	0.20	0.001	0.008
G	5.10	5.50	0.200	0.216
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.20	-	0.087	-
B	1.45	-	0.057	-
C	-	2.55	-	0.010
D	1.45	-	0.057	-
E	5.60REF		0.220REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SS52B-SS520B	DO-214AA(SMB)	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

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