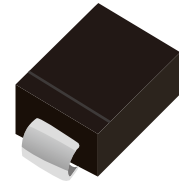
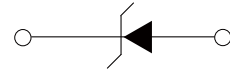


## FEATURES

- | 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

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

## MAXIMUM RATINGS (T<sub>A</sub> = 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 <sub>RRM</sub>	20	40	45	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	31.5	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current at T <sub>L</sub> = 100°C	I <sub>(AV)</sub>	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	120.0								A
Maximum Instantaneous Forward Voltage at 5.0A	V <sub>F</sub>	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current	I <sub>R</sub>	T <sub>A</sub> = 25°C		0.2		0.05				mA
		T <sub>A</sub> = 100°C		10		5				mA
Typical Thermal Resistance	R <sub>θJA</sub>	60.0								°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

# CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

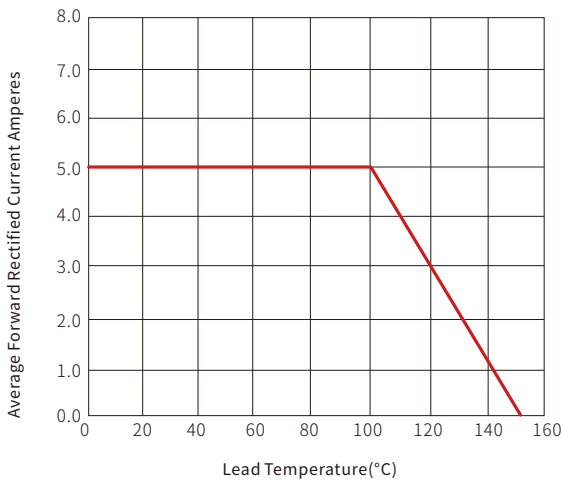


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

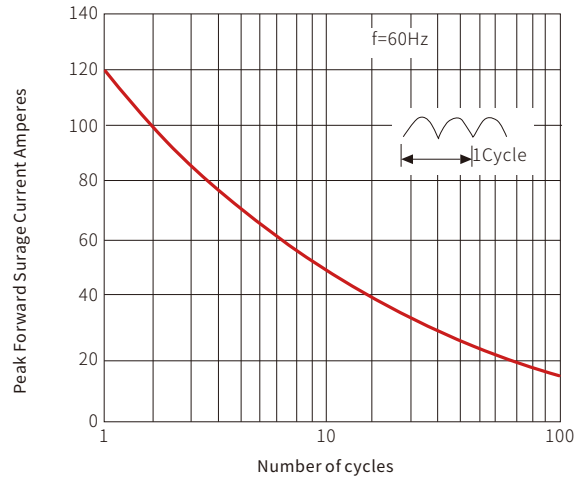


Fig. 3-Typical Forward Voltage Characteristics

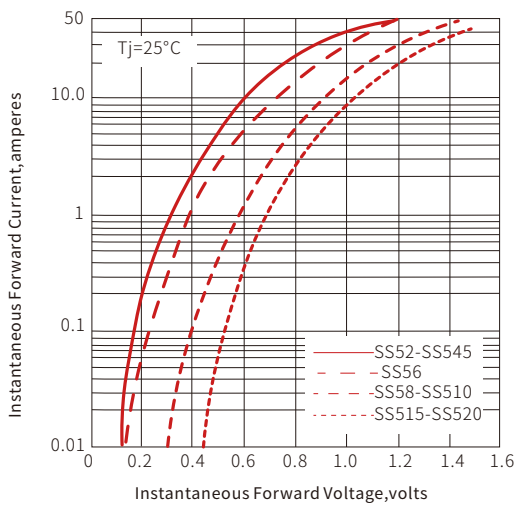
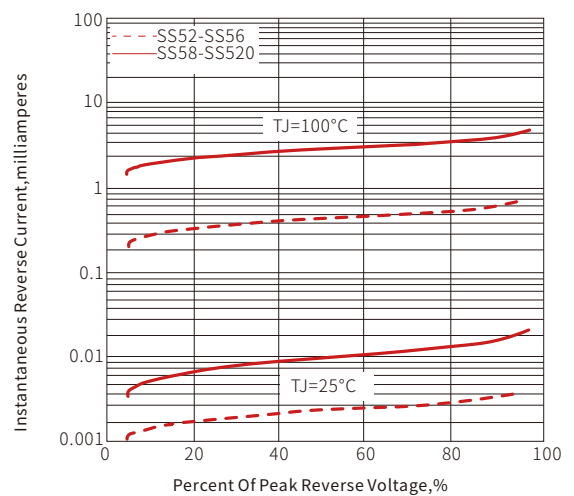
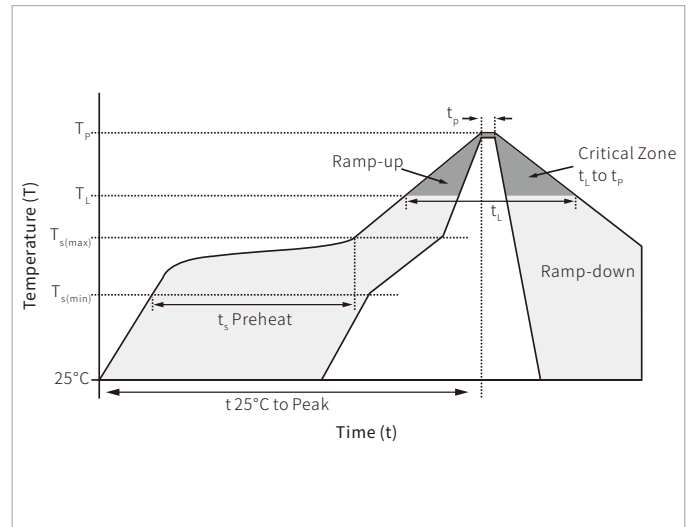


Fig. 4-Typical Reverse Leakage Characteristics

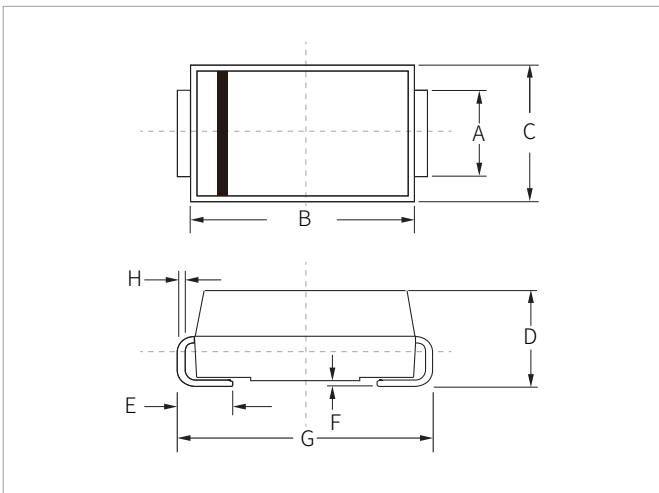


## SOLDERING PARAMETERS

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

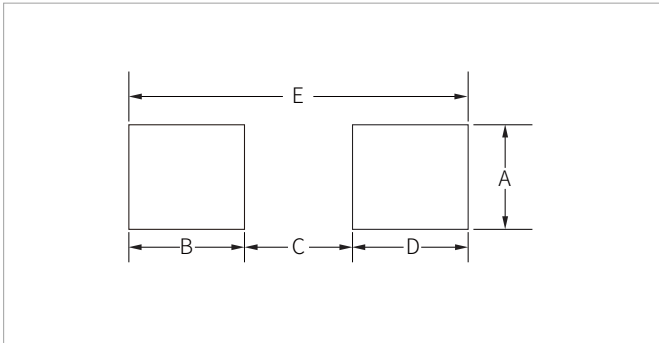


## DO-214AA(SMB) PACKAGE INFORMATION



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"

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Wechat

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