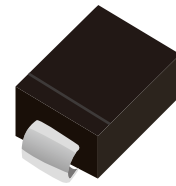
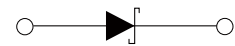


FEATURES

- For Surface Mounted Applications
- Built-in Strain Relief, ideal For Automated Placement
- Low Reverse Leakage
- High Forward Surge Current Capability
- Meet AEC-Q101 Requirements



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

Parameter		Symbol	SS 52BQ	SS 54BQ	SS 545BQ	SS 56BQ	SS 58BQ	SS 510BQ	SS 515BQ	SS 520BQ	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 _{θJA}	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

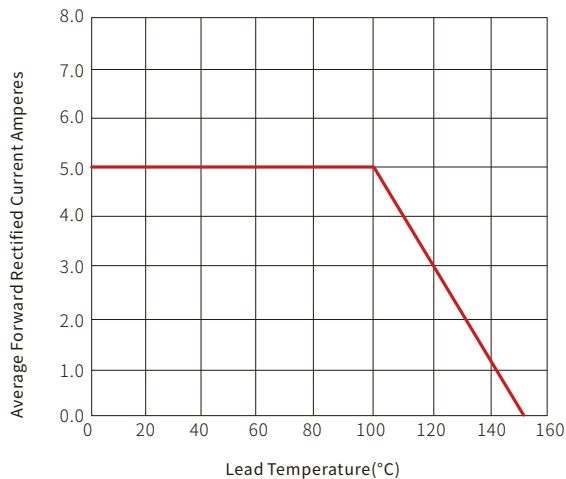


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

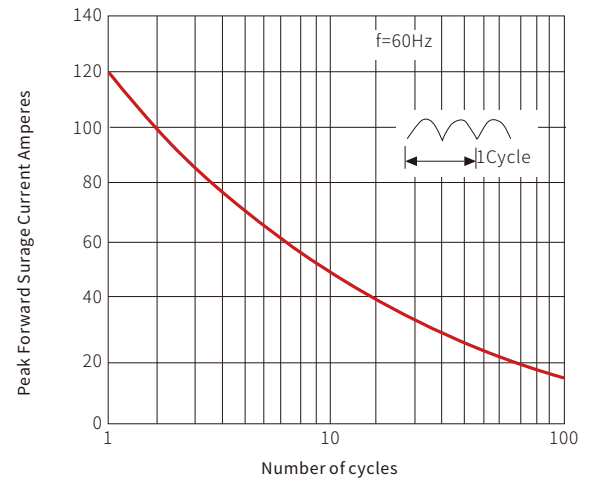


Fig. 3-Typical Forward Voltage Characteristics

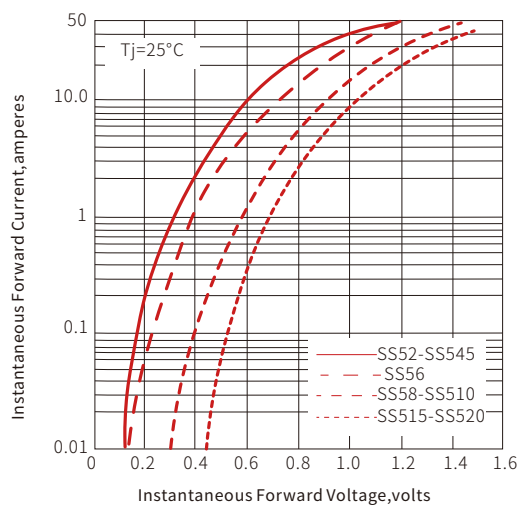
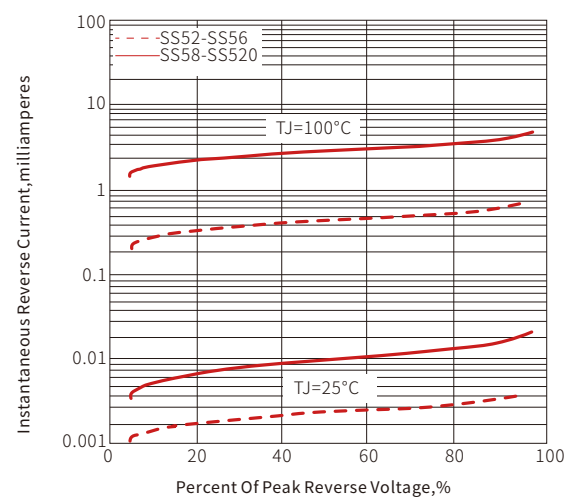
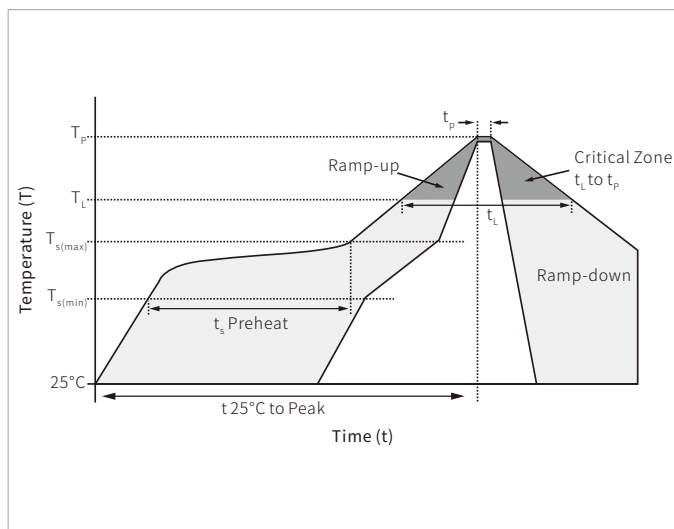


Fig. 4-Typical Reverse Leakage Characteristics

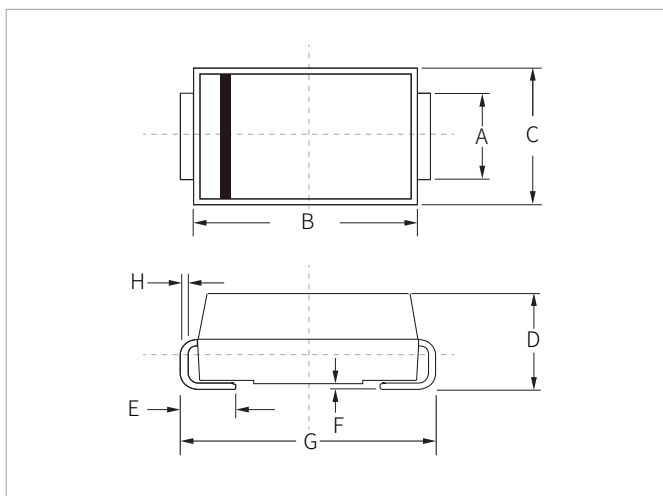


SOLDERING PARAMETERS

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

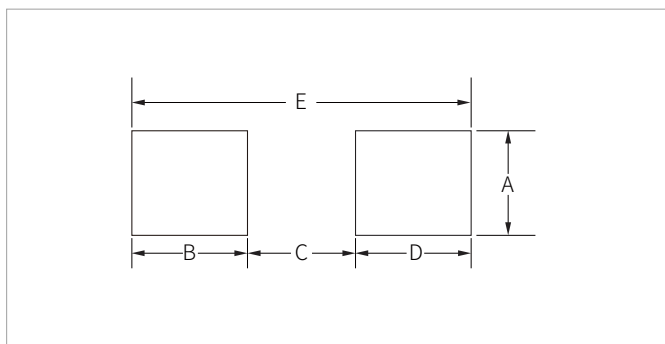


DO-214AA(SMB) PACKAGE INFORMATION



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
SS52BQ-SS520BQ	DO-214AA(SMB)	3000PCS	13"

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By QR Code

Website



Wechat

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