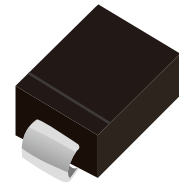
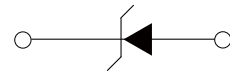


FEATURES

- | For surface mounted applications
- | Built-in strain relief, ideal for automated placement
- | Low reverse leakage
- | High forward surge current capability
- | High temperature soldering guaranteed 260°C/10 seconds at terminals



DO-214AA(SMB)



Schematic Symbol

APPLICATIONS

- | 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	I _R	T _A = 25°C		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

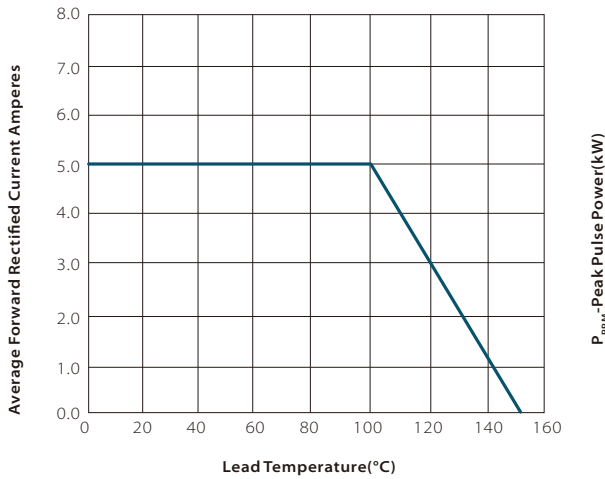


Fig. 2-maximum Non-repetitive Peak Forward Surge Current Perleg

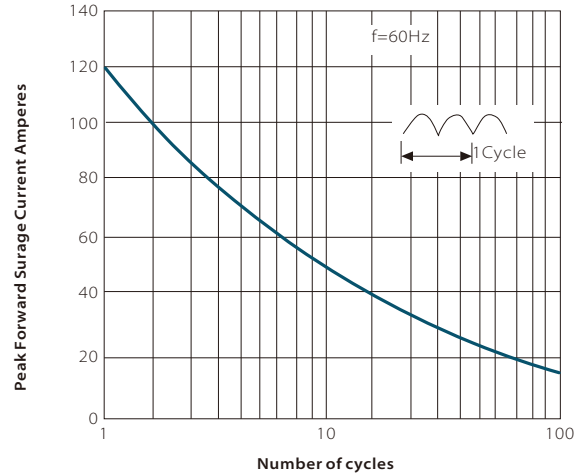


Fig. 3-typical Forward Voltage Characteristics

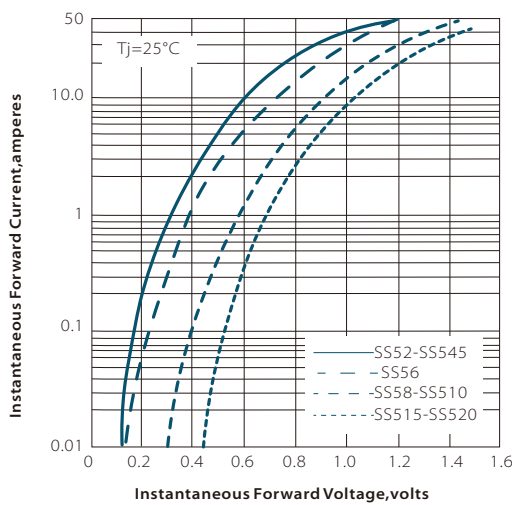
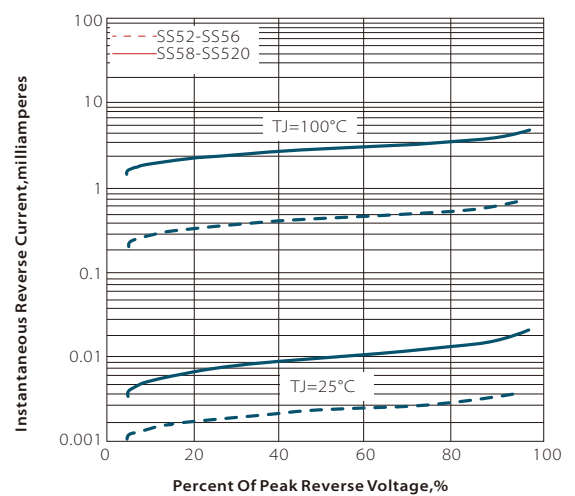
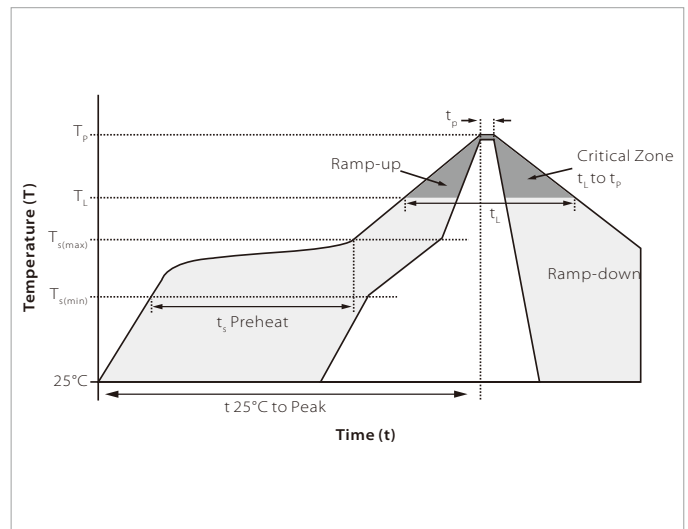


Fig. 4-typical Reverse Leakage Characteristics

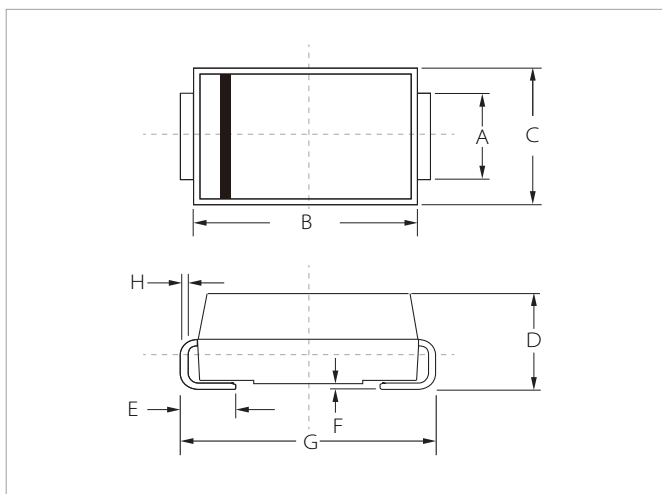


SOLDERING PARAMETERS

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_2)	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_1)	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

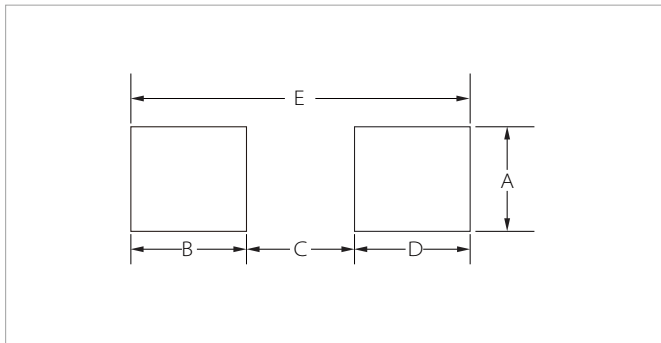


DO-214AA(SMB) PACKAGE INFORMATION



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	2.55	0.085	0.100
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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