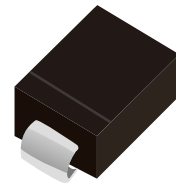


FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- 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 ($T_A=25^{\circ}\text{C}$)

Parameter		Symbol	SS12B	SS14B	SS16B	SS18B	SS110B	SS115B	SS120B	Unit
Marking			SS12	SS14	SS16	SS18	SS110	SS115	SS120	
Maximum repetitive peak reverse voltage		V _{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage		V _{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage		V _{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T _L =100°C		I _(AV)	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A		V _F	0.55	0.70	0.85	0.95				V
Maximum DC reverse current	T _A =25°C	I _R	0.5			0.05			mA	
	T _A =125°C		50			10			mA	
Typical thermal resistance		R _{θJA}	85.0							°C/W
Operating junction temperature range		T _J	-55 to +125			-55 to +150				°C
Storage temperature range		T _{STG}	-55 to +150							°C

CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

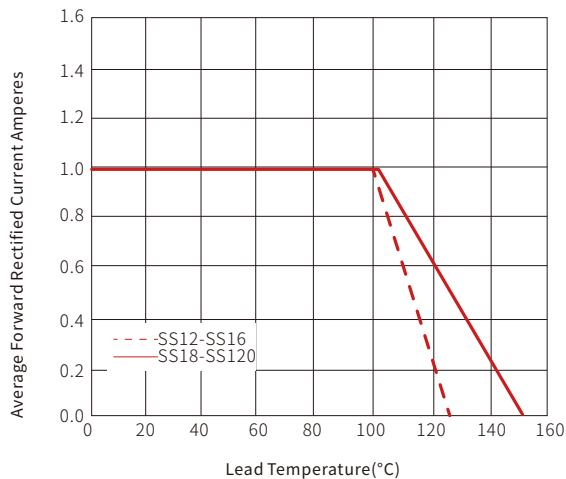


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

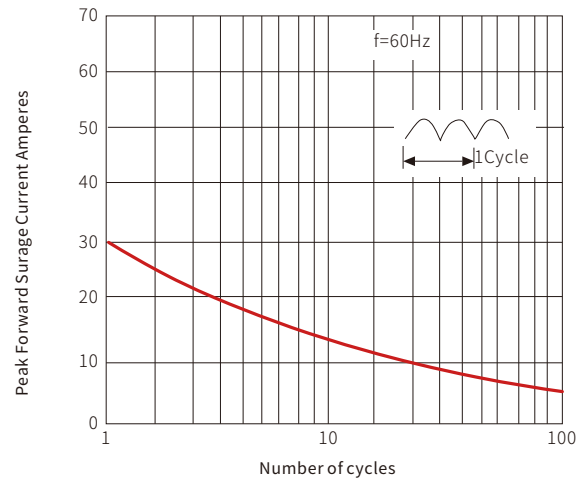


Fig. 3-Typical Forward Voltage Characteristics

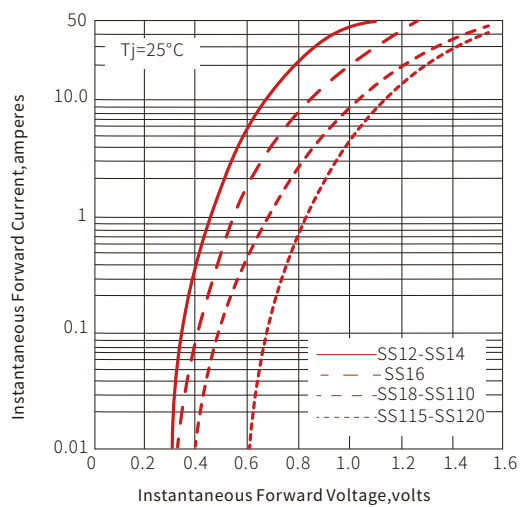
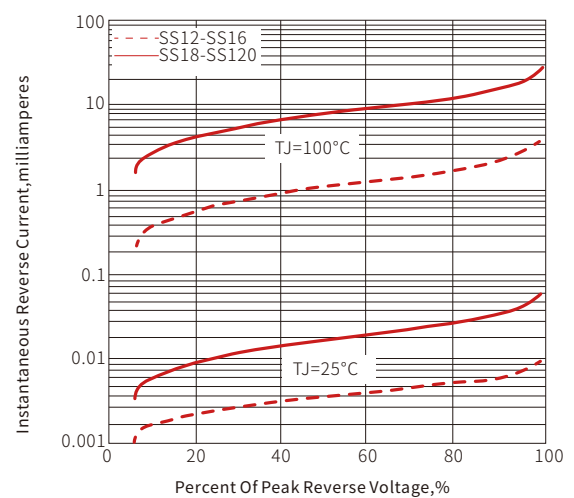
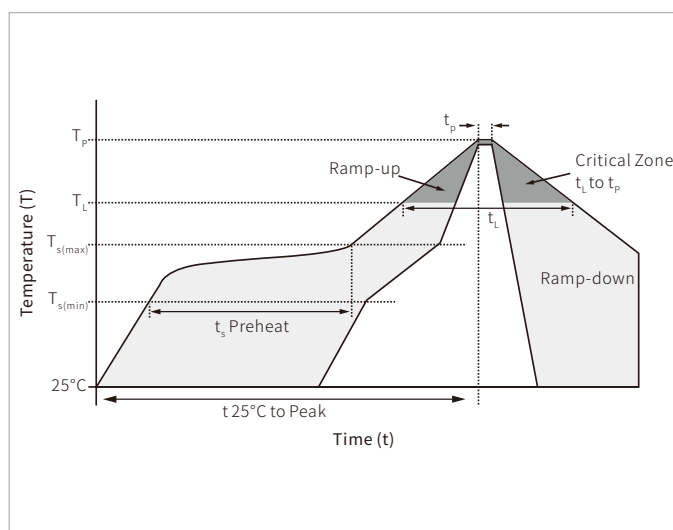


Fig. 4-Typical Reverse Leakage Characteristics

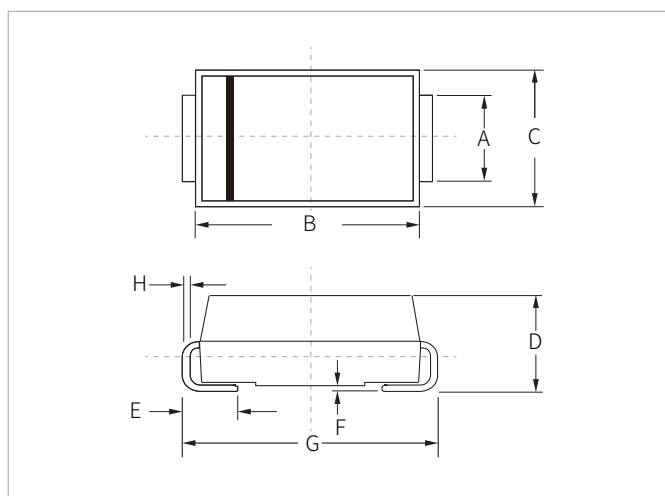


SOLDERING PARAMETERS

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

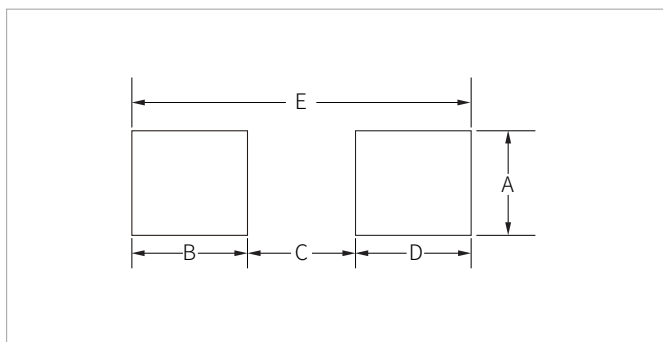


DO-214AA(SMB) PACKAGE INFORMATION



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
SS12B-SS120B	DO-214AA(SMB)	3000PCS	13"

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