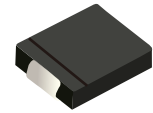
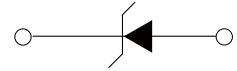


FEATURES

- | Low Reverse Leakage
- | High Forward Surge Capability
- | High Reliability
- | Lead And Body According With Rohs Standard



DO-214AB(SMC)



Schematic Symbol

MECHANICAL DATA

- | Polarity: Color Band Denotes Cathode End
- | Mounting Position: Any

APPROVALS

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

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

Parameter	Symbol	SS82C	SS83C	SS84C	SS85C	SS86C	SS88C	SS810C	SS815C	SS820C	Unit
Marking		SS82	SS83	SS84	SS85	SS86	SS88	SS810	SS815	SS820	
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Reverse Voltage,total RMS Value	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}^{1)}$	8.0									A
Non-Repetitive Peak Forward Surge Current 8.3 ms Singlehalf Sine-Wave	I_{FSM}	200									A
Maximum Forward Voltage @ $I_F=8.0A$	V_F	0.55			0.75		0.90		0.95		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	0.5					0.1				mA
	$T_A=100^{\circ}\text{C}$	20					10				mA
Typical Thermal Resistance Note 1	$R_{\theta JA}$	60			75		90			$^{\circ}\text{C}/\text{W}$	
	$R_{\theta JI}$	12			16		20			$^{\circ}\text{C}/\text{W}$	
Type Junction Capacitance $V_R=4.0V, f=1\text{MHz}$	C_J	400									pF
Operating Junction Temperature Range	T_J	-55 to +150									$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150									$^{\circ}\text{C}$

Note1):Thermal resistance from junction to ambient , PCB mounted

CHARACTERISTIC CURVES

Fig. 1- Typical Forward Characteristic

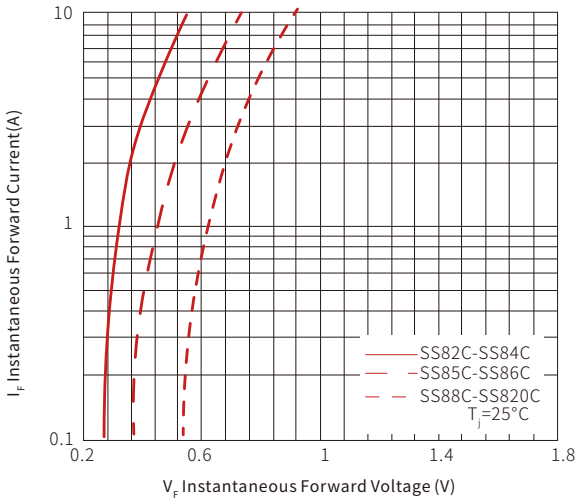


Fig. 2-Forward Current Derating Curve

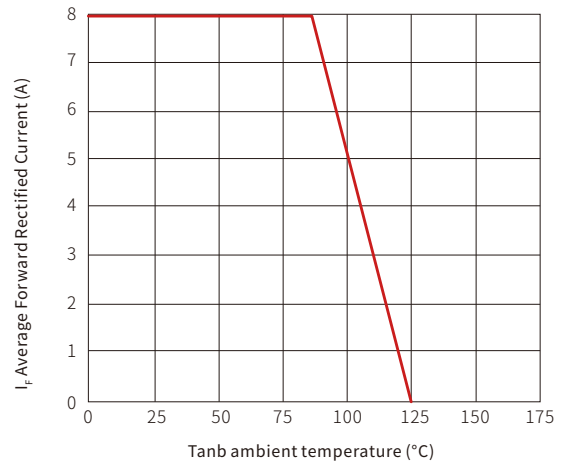


Fig. 3-Maximum Non Repetitive Peak Forward Surge Current

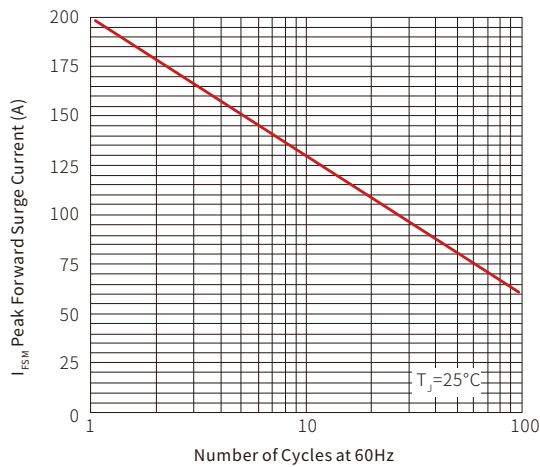
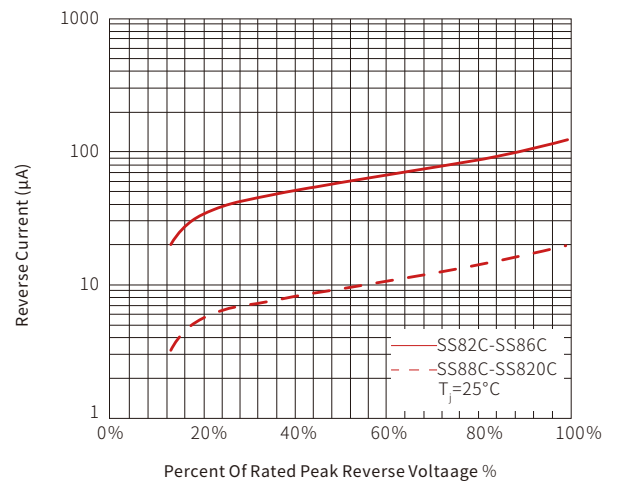
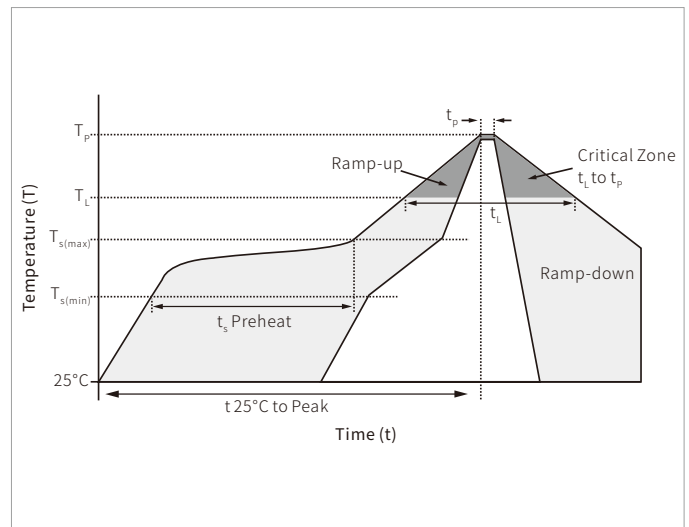


Fig. 4-Typical Reverse Characteristics

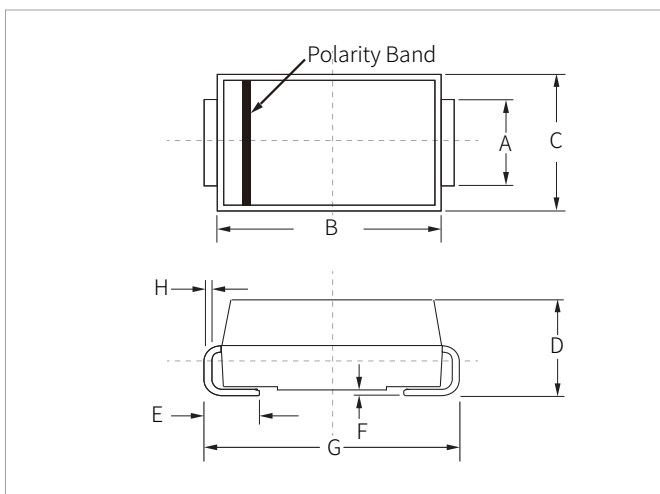


SOLDERING PARAMETERS

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

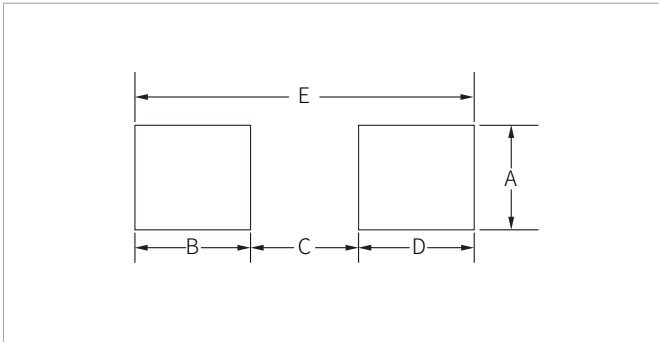


DO-214AB(SMC) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.20	0.110	0.126
B	6.60	7.20	0.260	0.283
C	5.70	6.10	0.224	0.240
D	2.15	2.75	0.085	0.108
E	1.00	1.60	0.039	0.063
F	0.02	0.20	0.000	0.008
G	7.60	8.00	0.299	0.315
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	-	0.129	-
B	2.40	-	0.094	-
C	-	4.20	-	0.165
D	2.40	-	0.094	-
E	8.20REF		0.323REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SS82C-SS820C	DO-214AB(SMC)	3000PCS	13"

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By QR Code

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