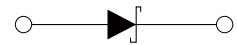


FEATURES

- | Low reverse leakage
- | High forward surge capability
- | High reliability
- | Meet AEC-Q101 Requirements



SMAF



Schematic Symbol

MECHANICAL DATA

- | Case:SMAF Molded plastic
- | UL 94V-0 rate flame retardant

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	SS 22AFQ	SS 24AFQ	SS 26AFQ	SS 210AFQ	SS 215AFQ	SS 220AFQ	Unit
Marking			SS22	SS24	SS26	SS210	SS215	SS220	
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	40	60	100	150	200	V
Maximum RMS Voltage		V _{RMS}	14	28	42	70	105	140	V
Maximum DS Blocking Voltage		V _{DC}	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current		I _{F(AV)}	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3 ms Singlehalf Sine-Wave		I _{FSM}	50						A
Maximum Forward Voltage @ I _F =2.0A		V _F	0.55		0.70	0.85	0.92	0.95	V
Maximum Reverse Current @V _{DC}	T _A =25°C	I _R	0.5			0.1			mA
	T _A =100°C		20			10			
Typical Thermal Resistance (Note 1)		R _{θJA}	85						°C/W
		R _{θJL}	25						
Type Junction Capacitance V _R =4.0v,f=1MHz		C _J	180						pF
Operating Junction Range		T _J	-55 to +125			-55 to +150			°C
Storage Temperature Range		T _{STG}	-55 to +150						°C

Note1): Thermal Resistance From Junction to Ambient , PCB Mounted.

CHARACTERISTIC CURVES

Fig. 1- Typical Forward Characteristic

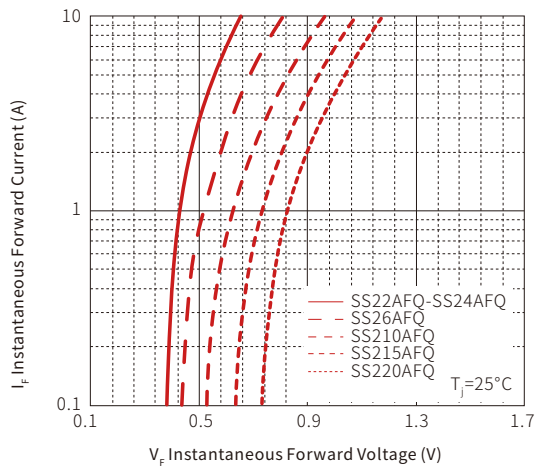


Fig. 2-forward Current Derating Curve

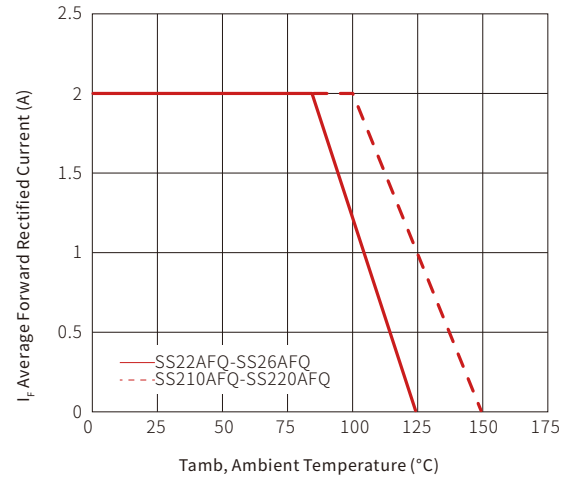


Fig. 3-Maximum Non Repetitive Peak Forward Surge Current

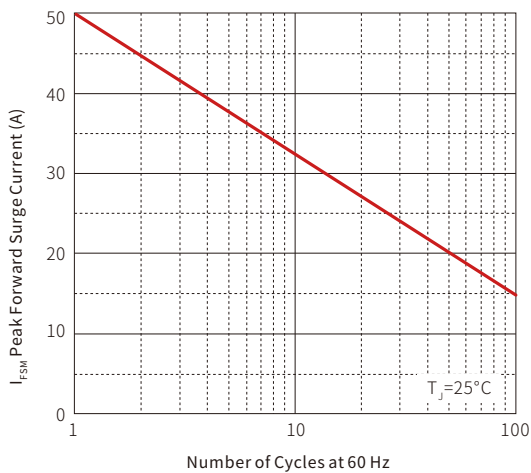
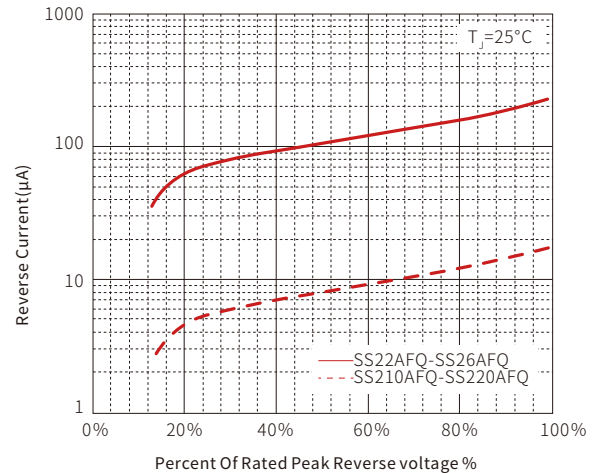
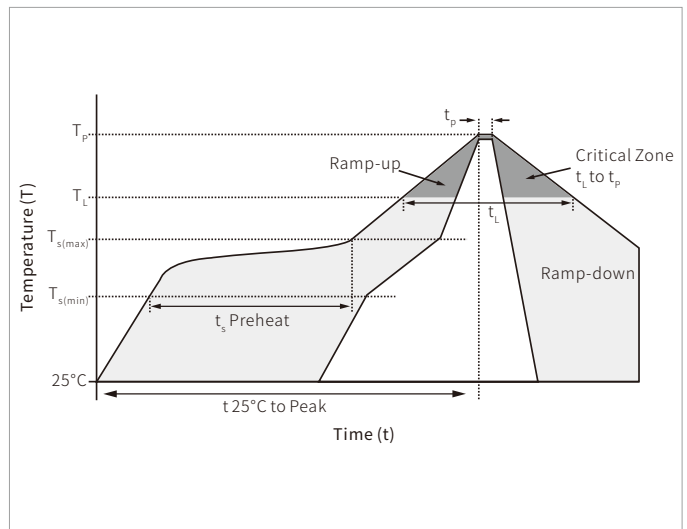


Fig. 4-Typical Reverse Characteristics

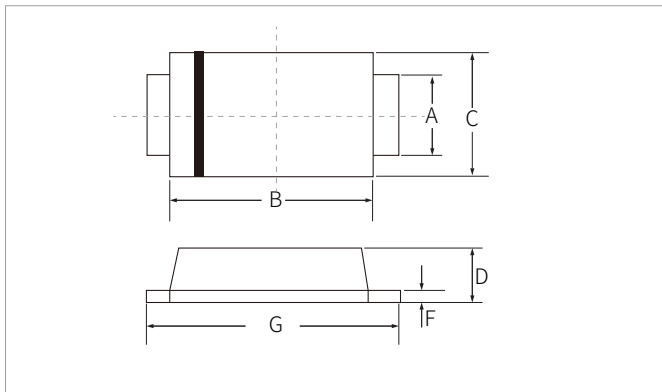


SOLDERING PARAMETERS

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

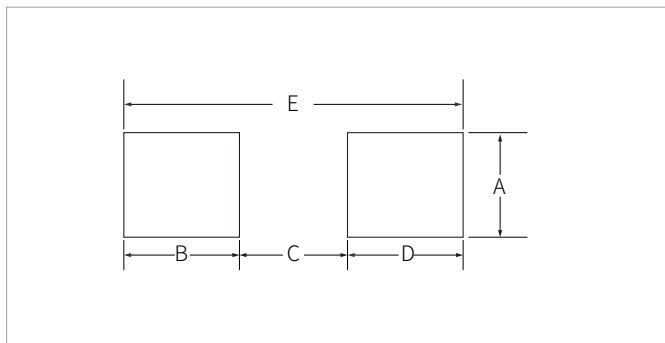


SMAF PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min	Max	Min	Max
A	1.35	1.60	0.053	0.063
B	3.40	3.80	0.134	0.145
C	2.40	2.80	0.094	0.110
D	0.95	1.45	0.037	0.057
F	0.15	0.22	0.006	0.009
G	4.40	4.80	0.173	0.189

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min	Max	Min	Max
A	1.70	-	0.067	-
B	2.50	-	0.098	-
C	-	1.5	-	0.059
D	2.50	-	0.098	-
E	6.50REF		0.256REF	

ORDERING INFORMATION

Part Number	Package	QTY/Reel	Reel Size
SS22AFQ-220AFQ	SMAF	5000PCS	13"

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By QR Code

Website



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