SS22F THRU SS220F

Surface Mount Schottky Barrier Rectifier

Reverse Voltage -20V to 200V
Forward Current -2.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View
Simplified outline SMAF and symbol

Features

- Metal silicon junction,majority carrier conduction
- For surface mounted applications
- Low power loss,high efficiency
- High forward surge current capability
- For use in low voltage,high frequency inverters, free wheeling,and polarity protection applications

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.Single phase,half wave,60Hz resistive or inductive load,for capacitive load,derate by 20%

Parameter		Symbol	SS 22F	SS 24F	SS 245F	SS 26F	SS 28F	SS 210F	SS 212F	SS 215F	SS 220F	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS Voltage		V_{RMS}	14	28	32	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	40	45	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current@Fig.1		$I_{F(AV)}$	2.0									A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed On Rated Load(JEDEC method)		I_{FSM}	50									A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed On Rated Load(JEDEC method)		I_{FSM}	100									A
I^2t Rating for fusing (3ms≤8.3ms)		I^2t	10.3									A^2S
Max Instantaneous Forward Voltage at 2A		V_F	0.55			0.70	0.85		0.95			V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T_a = 25℃	I_R	0.5				0.3					mA
	T_a =100℃		5				3					
Typical Junction Capacitance(1)		C_j	93			70	53		40		35	pF
Typical Thermal Resistance(2)		$R_{\theta JA}$	100									℃/W
		$R_{\theta JC}$	20									
		$R_{\theta JL}$	30									
Operating Junction Temperature Range		T_j	-55~+125									℃
Storage Temperature Range		T_{stg}	-55~+150									℃

(1)Measured at 1MHz and applied reverse voltage of 4V D.C
(2)P.C.B. mounted with 0.2”x0.2”(5×5mm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

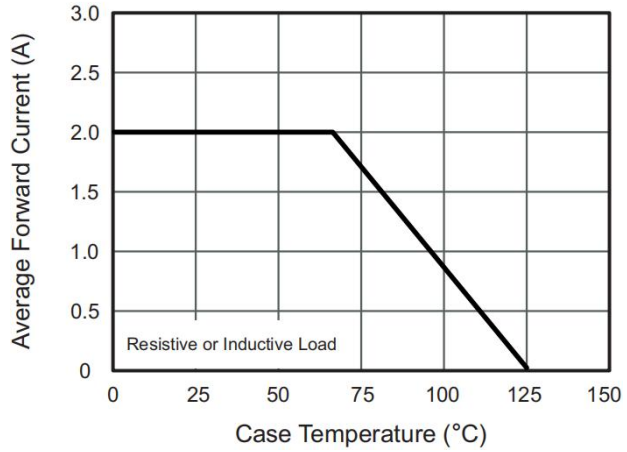


Fig.2 Typical Reverse Characteristics

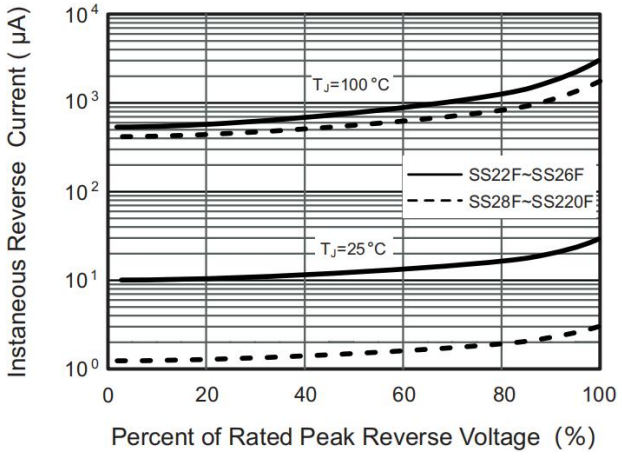


Fig.3 Typical Forward Characteristic

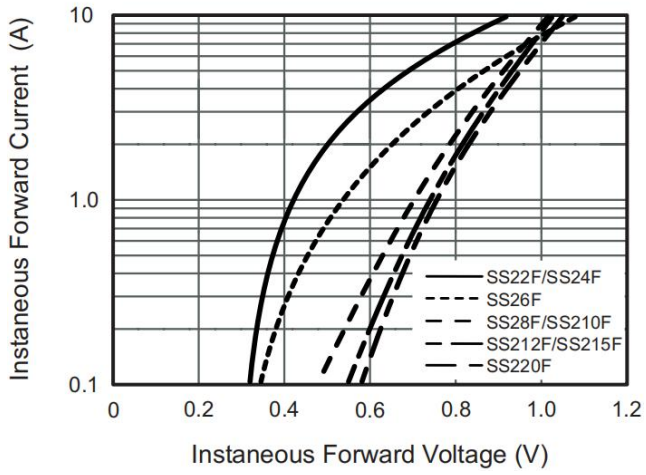


Fig.4 Typical Junction Capacitance

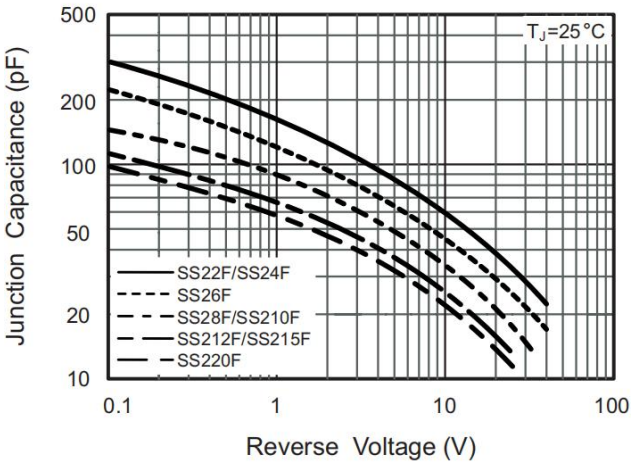
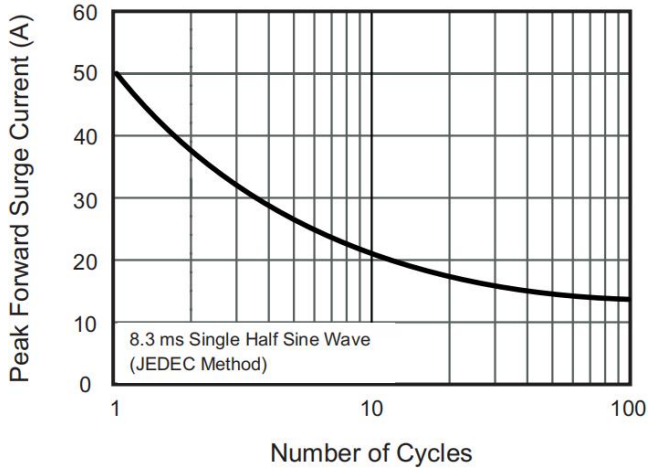


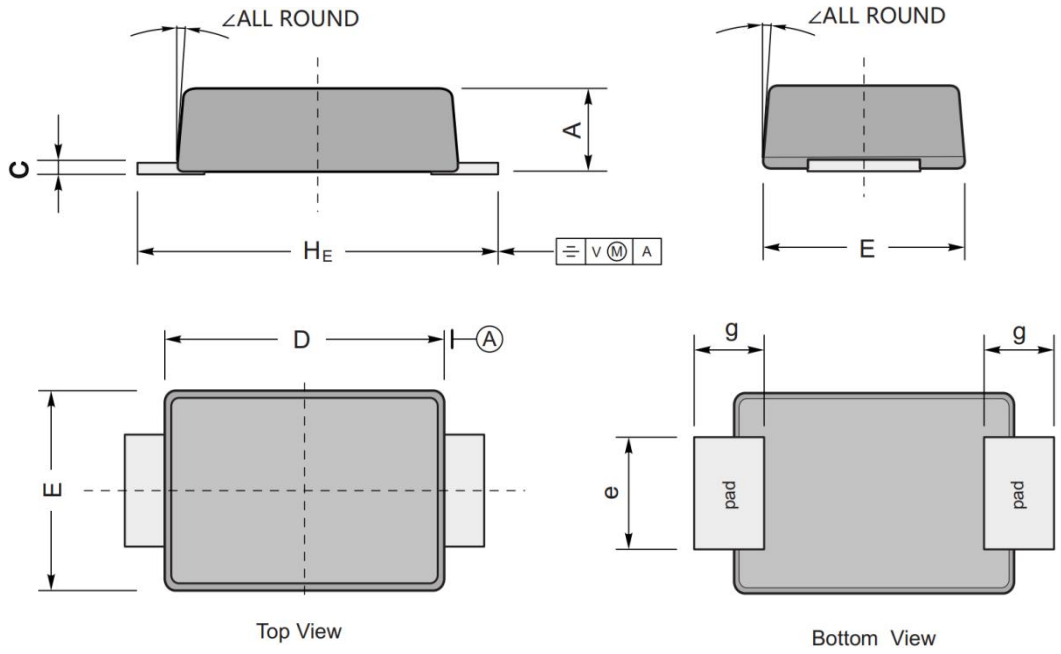
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Information

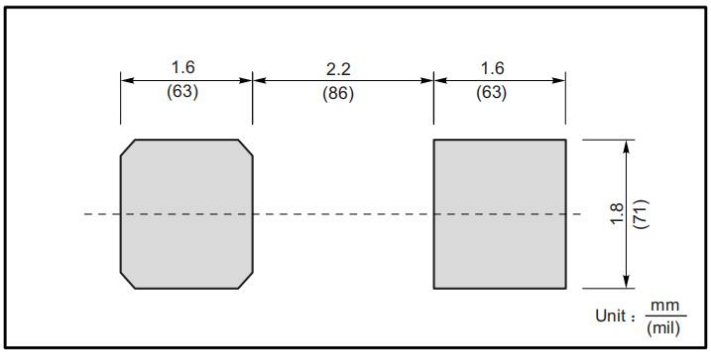
SMAF

Dimensions in mm



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	47	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

The recommended mounting pad size



Marking

Type number	Marking code
SS22F	SS22
SS24F	SS24
SS245F	SS245
SS26F	SS26
SS28F	SS28
SS210F	SS210
SS212F	SS212
SS215F	SS215
SS220F	SS220

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