DESCRIPTION

The SM220AF~SM2200AF are available in SMAF package.

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
- Available in SMAF package

ORDERING INFORMATION

Package Type	Part Number
SMAF	SM220AF
	SM240AF
	SM260AF
	SM280AF
	SM2100AF
	SM2120AF
	SM2150AF
	SM2200AF
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

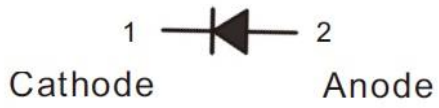
MECHANICAL DATA

Case: SMAF

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 27mg 0.00086oz

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	SM 220AF	SM 240AF	SM 260AF	SM 280AF	SM 2100AF	SM 2120AF	SM 2150AF	SM 2200AF	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50				40				A
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°C	I_R	0.5				0.3				mA
T_A=100°C		5				3				
Typical Junction Capacitance NOTE1	C_j	220		80						pF
Operating Junction Temperature Range	T_J	-55 to +125								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

NOTE1: Measured at 1MHz and applied reverse voltage of 4V D.C

TYPICAL PERFORMANCE CHARACTERISTICS

Figure. 1 Forward Current Derating Curve

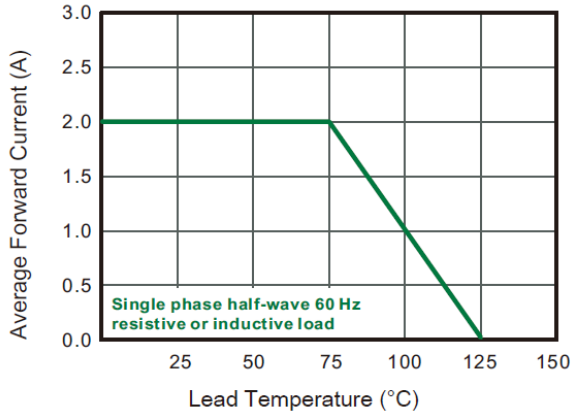


Figure. 2 Typical Reverse Characteristics

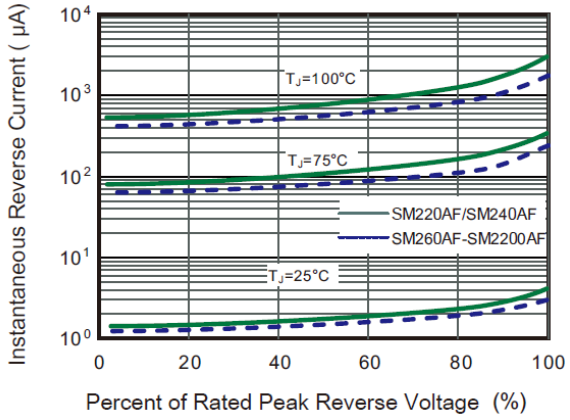


Figure. 3 Typical Forward Characteristic

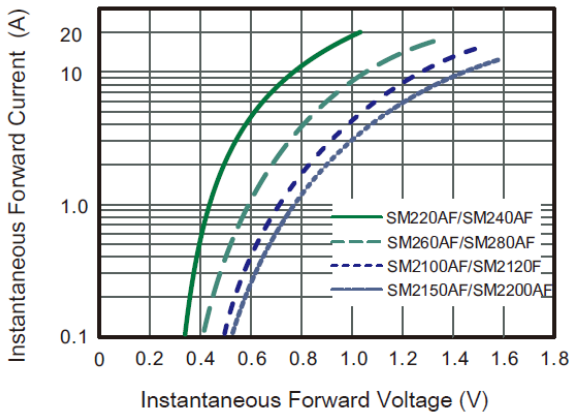


Figure. 4 Typical Junction Capacitance

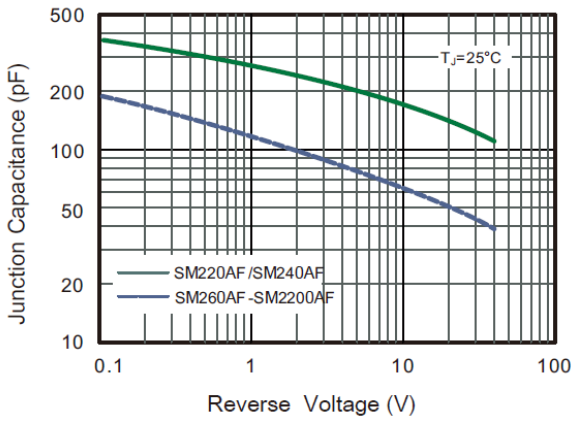
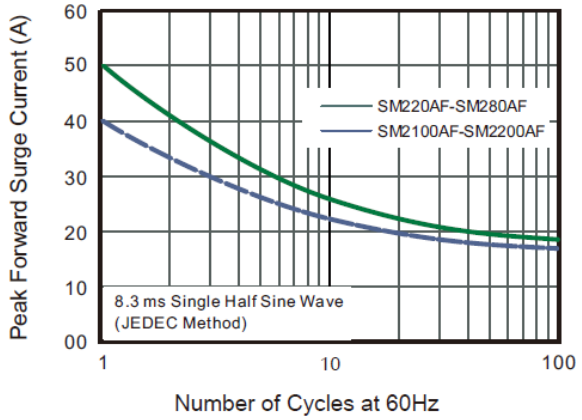
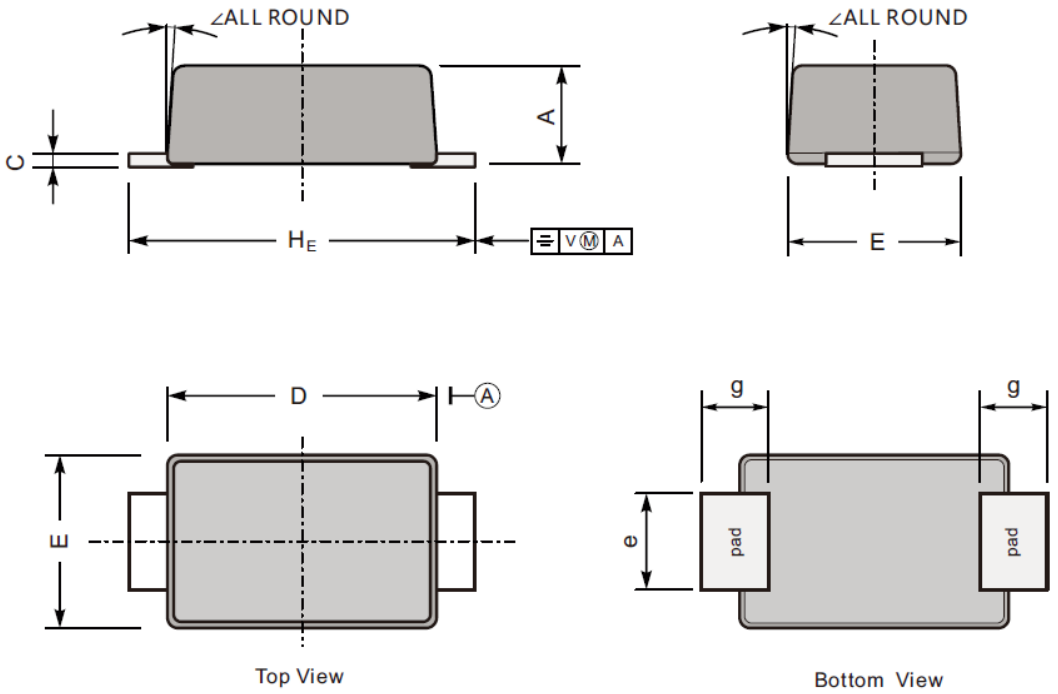


Figure. 5 Maximum Non-Repetitive Peak Forward Surge Current

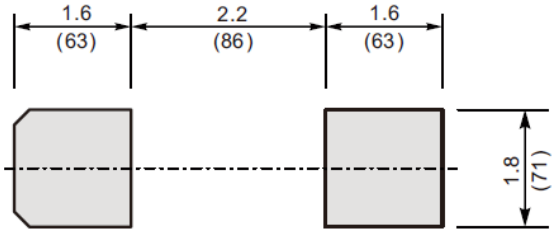


PACKAGE INFORMATION

Dimension in SMAF Package (Unit: mm)



The recommended mounting pad size



Unit: mm (mil)

UNIT		A	C	D	E	e	g	H_E	∠
mm	Min	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	Max	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	Min	43	7.9	146	106	63	47	193	
	Max	35	4.7	130	94	51	31	173	

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