

FEATURES

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



SMAF



Cathode

MECHANICAL DATA

- Case: SMAF Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Weight: 27mg (approx.)

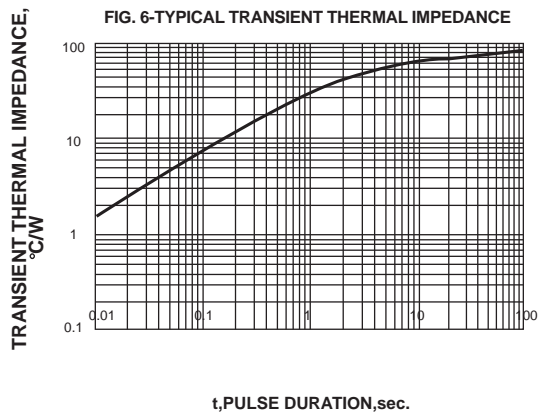
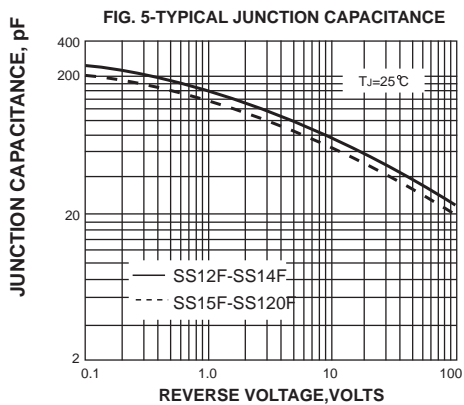
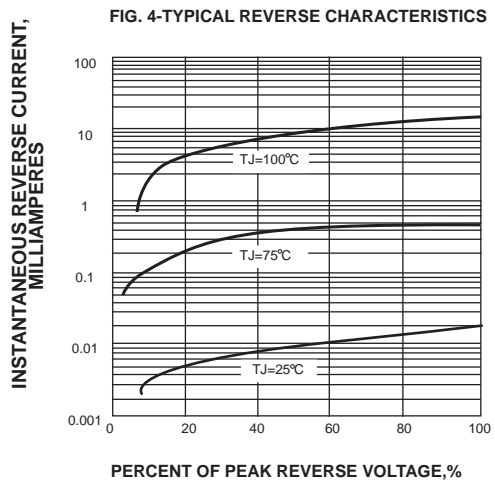
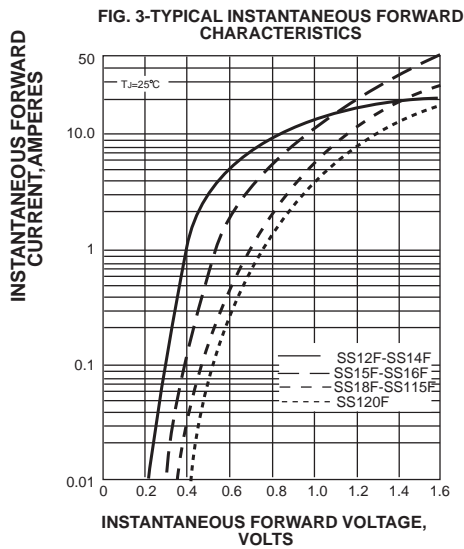
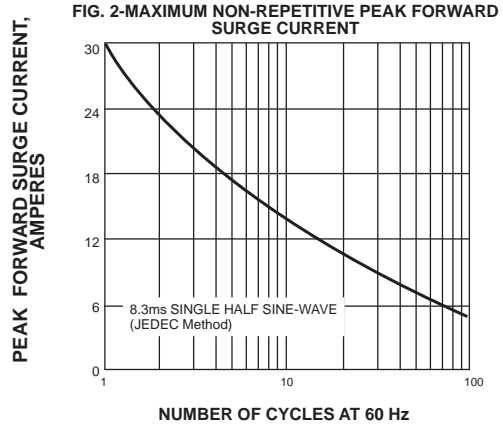
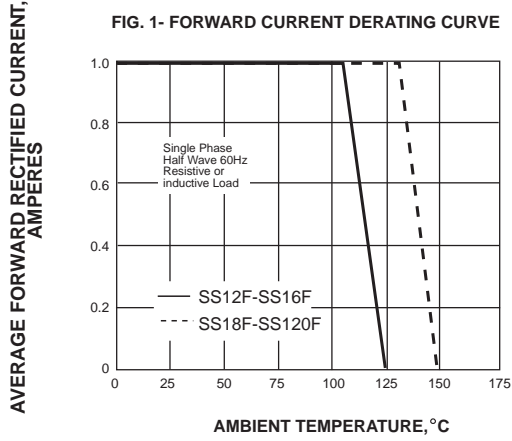
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

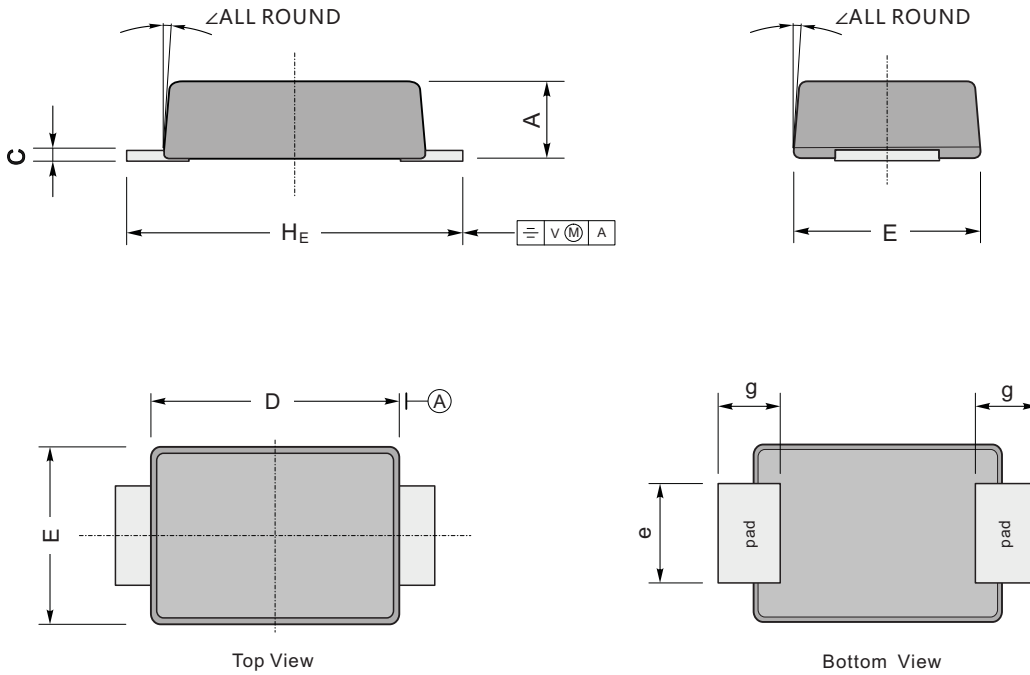
Parameter	Symbol	SS 12F	SS 13F	SS 14F	SS 15F	SS 16F	SS 18F	SS 110F	SS 115F	SS 120F	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0									A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30.0									A
Maximum Instantaneous Forward Voltage at 1A	V_F	0.45	0.55	0.70		0.85		0.95			V
Maximum DC Reverse Current Cat Rated DC Blocking Voltage	I_R @ $T_A = 25^\circ C$ @ $T_A = 100^\circ C$	0.5						0.2			mA
		10.0				5.0		2.0			mA
Typical Junction Capacitance(Note1)	C_j	110			90						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	88									$^\circ C/w$
Operating Temperature Range	T_J	-50 to +150									$^\circ C$
Storage Temperature Range	T_{STG}	-50 to +150									$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Typical Characteristics



SMAF Package Outline Dimensions



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	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	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	