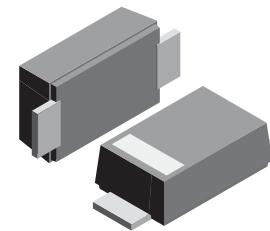


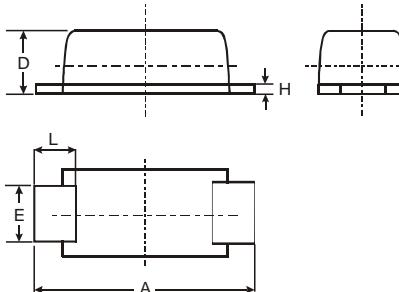
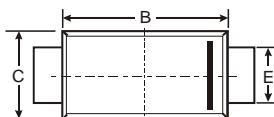
**VOLTAGE RANGE: 20 - 100V**

**CURRENT: 1.0 A**



### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375(9.5mm) lead length,  
5 lbs. (2.3kg) tension



SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

### Mechanical Data

- Case: SMAF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0018 ounce, 0.064 grams



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SS1020F	SS1030F	SS1040F	SS1060F	SS1080F	SS10100F	Unit
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	20	30	40	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	42	56	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	60	80	100	V
Maximum average forward rectified current <small>T<sub>j</sub>=90</small>	I <sub>(AV)</sub>	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I <sub>FSM</sub>	20						A
Maximum instantaneous @I <sub>FM</sub> =1.0A forward voltage	V <sub>F</sub>	0.50	0.55	0.72	0.85			V
Repetitive peak reverse current at rated DC blocking voltage	I <sub>R</sub>	0.3						mA
Typical junction capacitance	C <sub>J</sub>	30						p F
Operating temperature range	T <sub>j</sub>	- 55 --- + 125						
Storage temperature range	T <sub>STG</sub>	- 55 --- + 150						

NOTE1. Measured at f=1.0MHz, V<sub>R</sub>=4.0V



**SUNMATE**

## RATINGS AND CHARACTERISTIC CURVES SS1020F THRU SS10100F

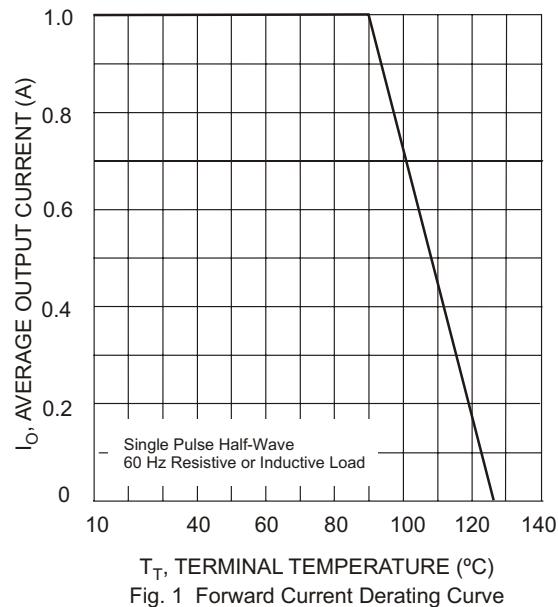


Fig. 1 Forward Current Derating Curve

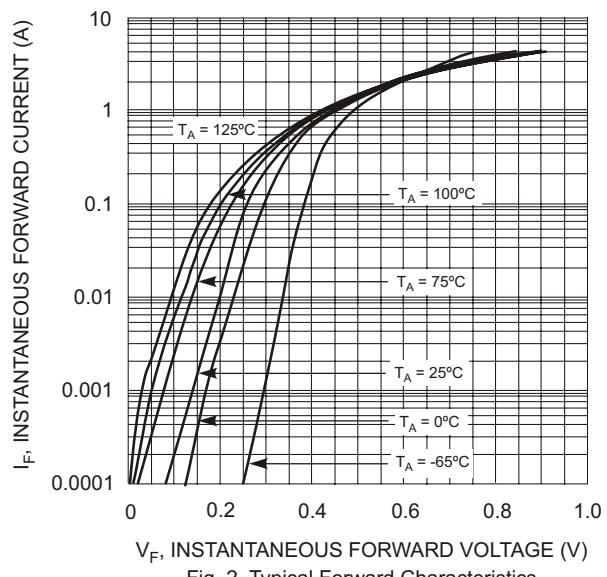


Fig. 2 Typical Forward Characteristics

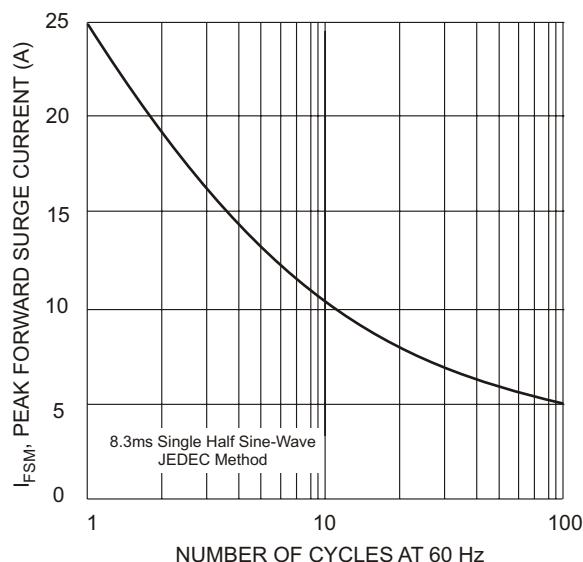


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

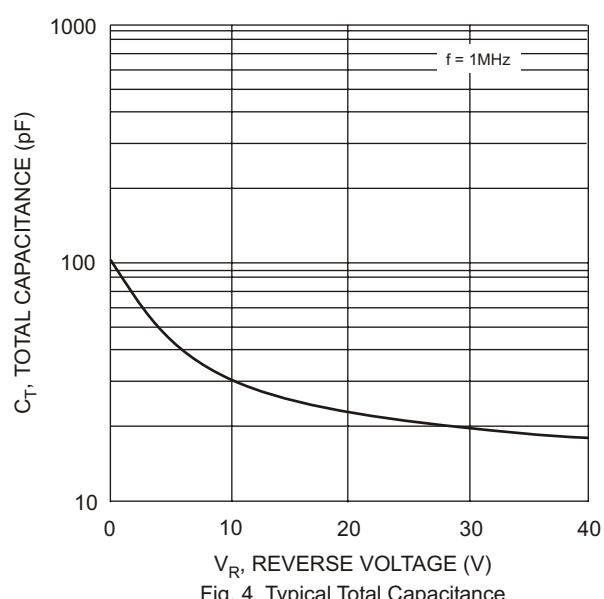


Fig. 4 Typical Total Capacitance