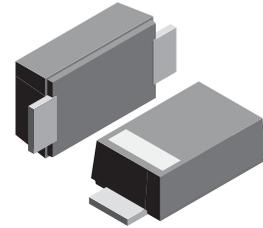


VOLTAGE RANGE: 50 - 1000V

CURRENT: 2.0 A

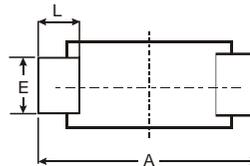
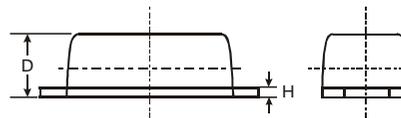
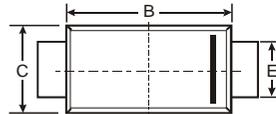
Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Ideally Suited for Automated Assembly



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



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			

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	S2AAF	S2BAF	S2DAF	S2GAF	S2JAF	S2KAF	S2MAF	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_T = 100^\circ\text{C}$	$I_{(AV)}$	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60							A
Forward Voltage @ $I_F = 2.0\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	5.0 200							μA
Typical Total Capacitance (Note 1)	C_T	30							pF
Typical Thermal Resistance, Junction to Terminal (Note 2)	$R_{\theta JT}$	16							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ\text{C}$

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal Resistance Junction to Terminal, unit mounted on PC board with 5.0 mm² (0.013 mm thick) copper pads as heat sink.

RATING AND CHARACTERISTIC CURVES S2AAF THRU S2MAF

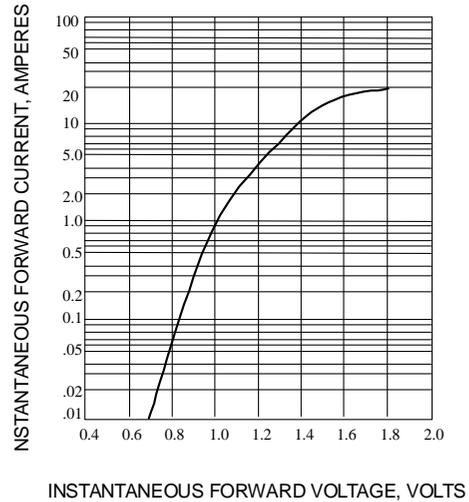
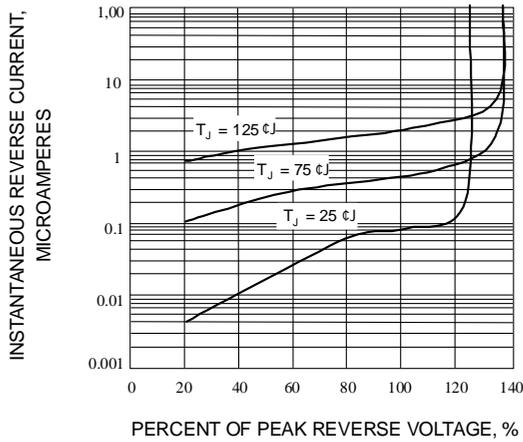
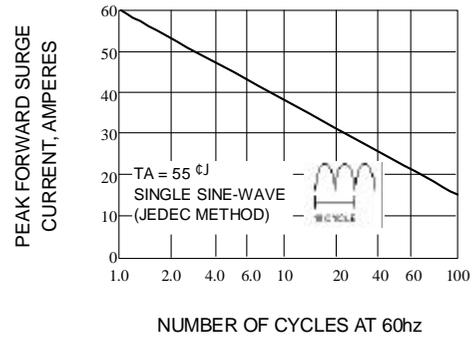
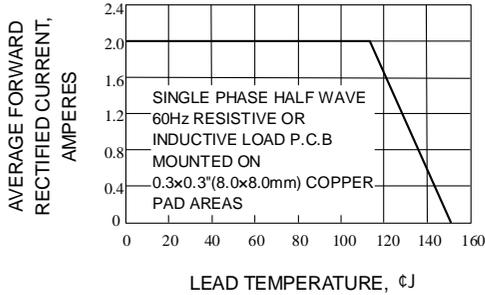


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

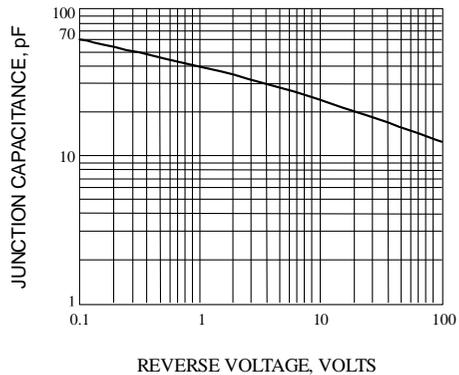
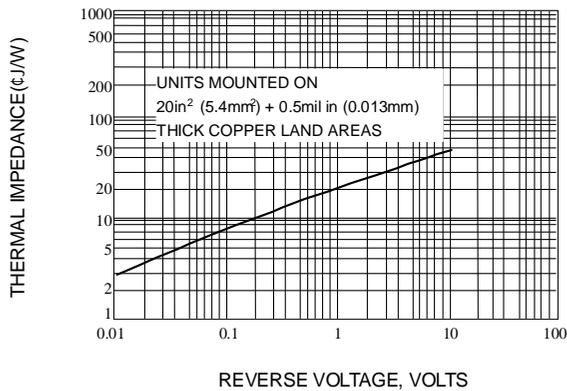


Fig. 5-TRANSIENT THERMAL IMPEDANCE

Fig. 6-TYPICAL JUNCTION CAPACITANCE