

Surface Mount Rectifiers

Reverse Voltage 50 to 1000 Volts Forward Current 1.0 Ampere

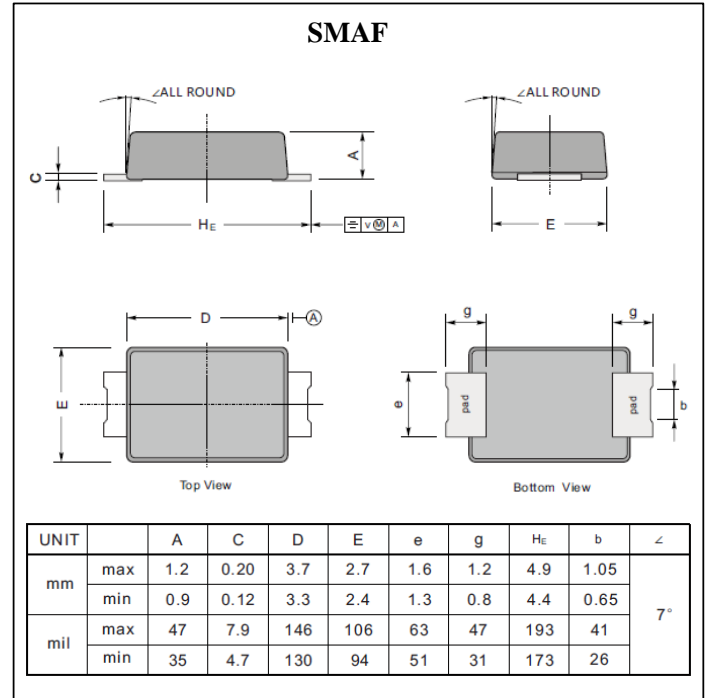
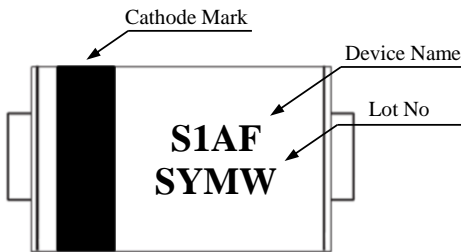
Features

- For surface mounted applications
- Glass passivated junction chip
- Low forward voltage drop
- Easy pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives
- High temperature soldering : 260°C /10 seconds at terminals

Mechanical Data

- Case : SMAF Molded plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.027gram

Marking



Maximum Ratings & Electrical Characteristics

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

Parameter	Symbol	S1AF	S1BF	S1DF	S1GF	S1JF	S1KF	S1MF	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0							A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30							A	
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.1							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	5.0							uA	Ta=25°C
		50							uA	Ta=125°C
Typical Junction Capacitance	C _J	15							pF	Note 1
Typical Thermal Resistance	R _{th(j-a)}	80							°C /W	Note 2
	R _{th(j-c)}	27							°C /W	
Operation Junction Temperature Range	T _J	-55 to +150							°C	
Storage Temperature Range	T _{STG}	-55 to +150							°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.
 Note 2. Mount on Cu-Pad Size 2.0" × 2.0"(5 × 5cm) on P.C.B.

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

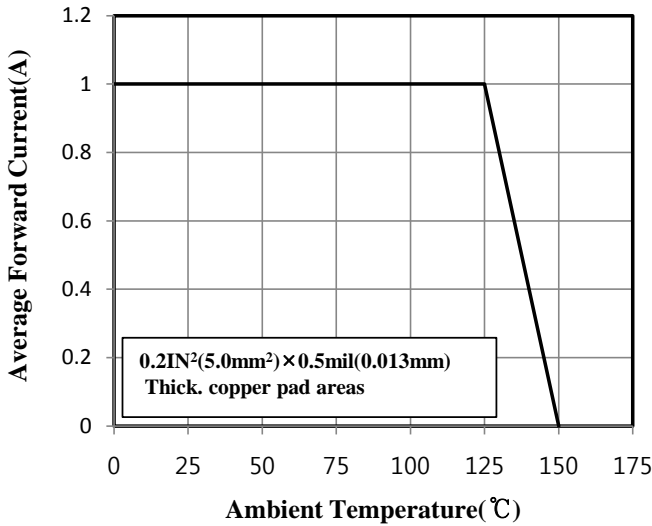


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

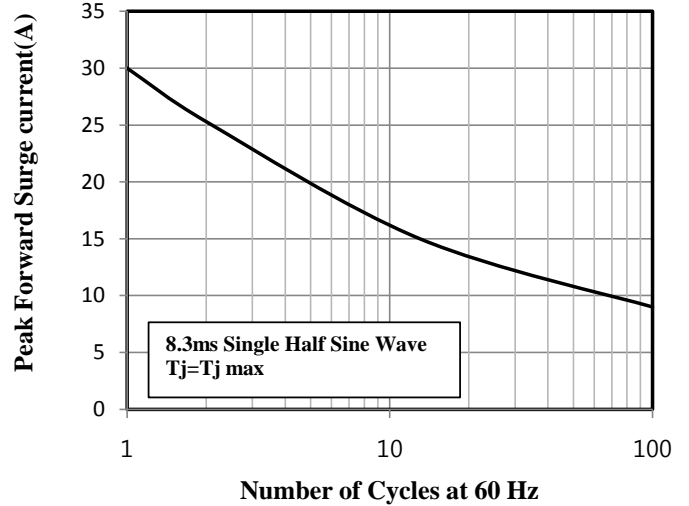


Fig.3 Typical Instantaneous Forward Characteristics

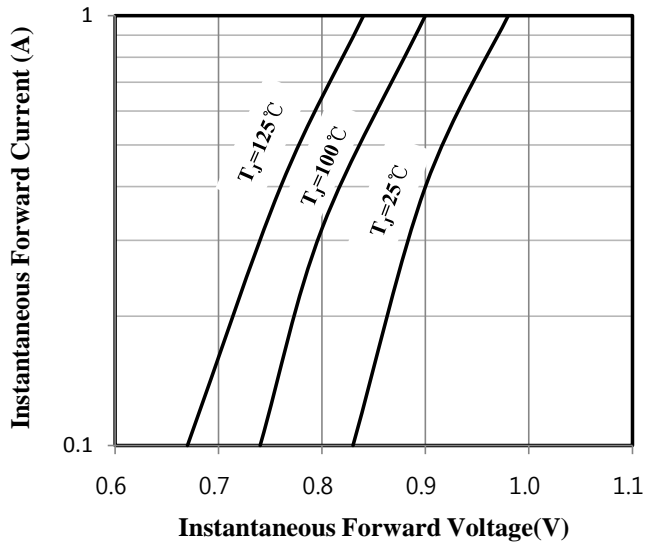


Fig.4 Typical Junction Capacitance

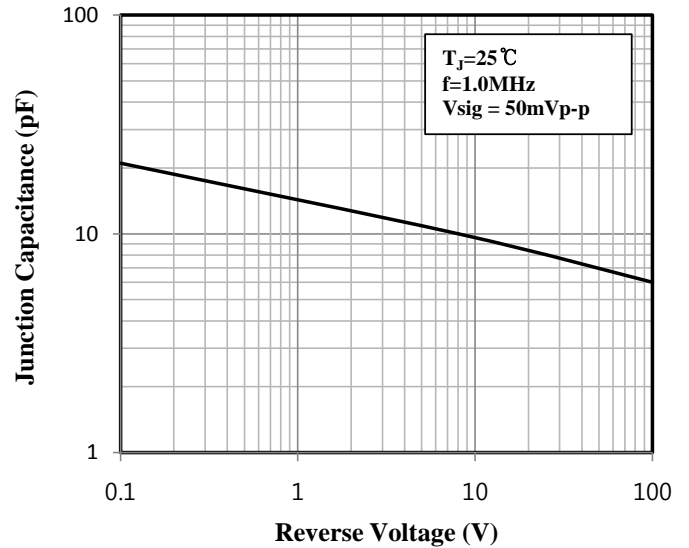


Fig.5 Typical Reverse Characteristics

