



Surface Mount Low VF Schottky Barrier Rectifier
Reverse Voltage 45 Volts Forward Current 3.0 Amperes

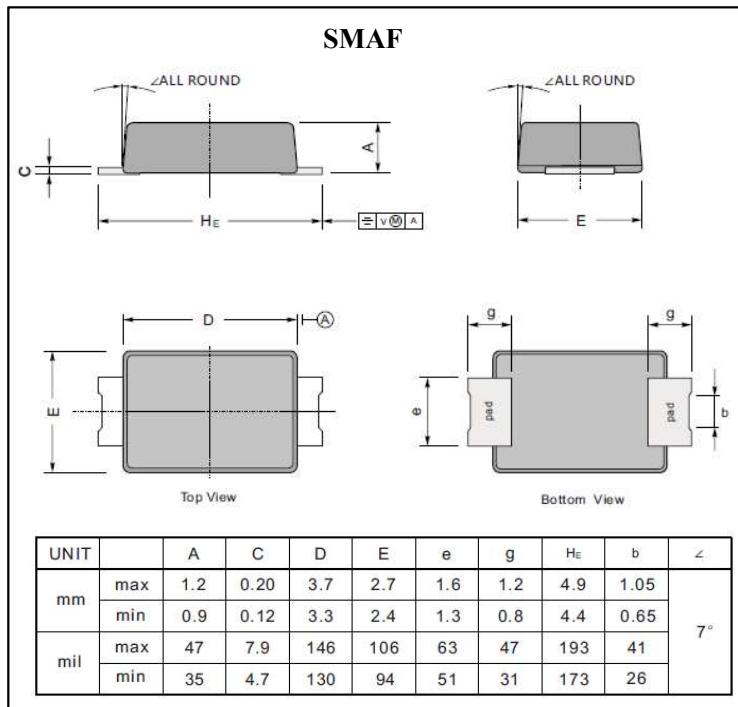
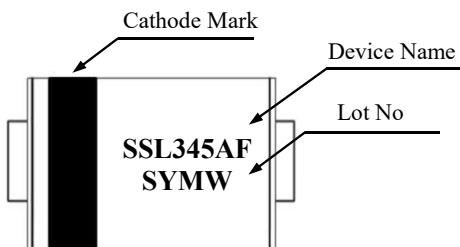
Features

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters,
- free wheeling, and polarity protection applications

Mechanical Data

- Case : SMAF
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. 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	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	45	V	
Maximum RMS Voltage	V _{RMS}	32	V	
Maximum DC Blocking Voltage	V _{DC}	45	V	
Maximum Average Forward Rectified Current(Fig. 1)	I _{F(AV)}	3.0	A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	80	A	
Maximum Instantaneous Forward Voltage @ 3.0A	V _F	0.55	V	Note 1
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5	mA	T _a =25°C
		5.0	mA	T _a =100°C
Typical Junction Capacitance	C _j	300	pF	Note 2
Typical Thermal Resistance	R _{th(j-a)}	60	°C /W	Note 3
Operation Junction Temperature Range	T _J	-55 to +150	°C	
Storage Temperature Range	T _{STG}	-55 to +150	°C	

Note 1. Pulse Test with PW=300usec, 1% Duty Cycle

Note 2. Measured at 1MHz and applied reverse voltage of 4V D. C.

Note 3. Mount on Cu-Pad Size 1.0 mm×1.0 mm on P.C.B.



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

Fig.1 Forward Current Derating Curve

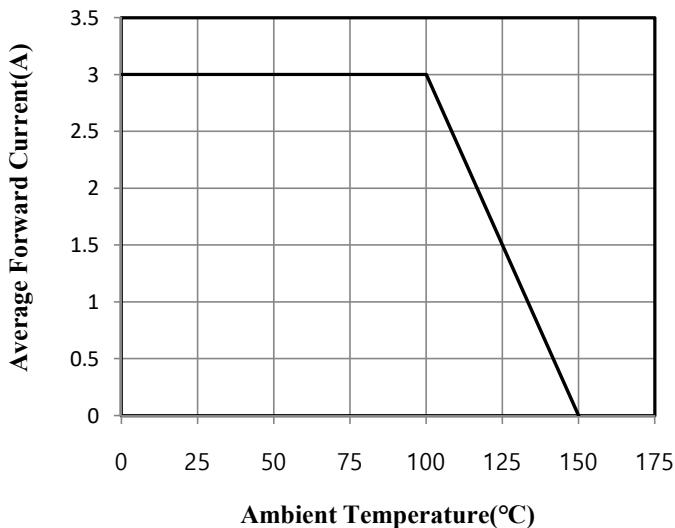


Fig.3 Typical Instantaneous Forward Characteristics

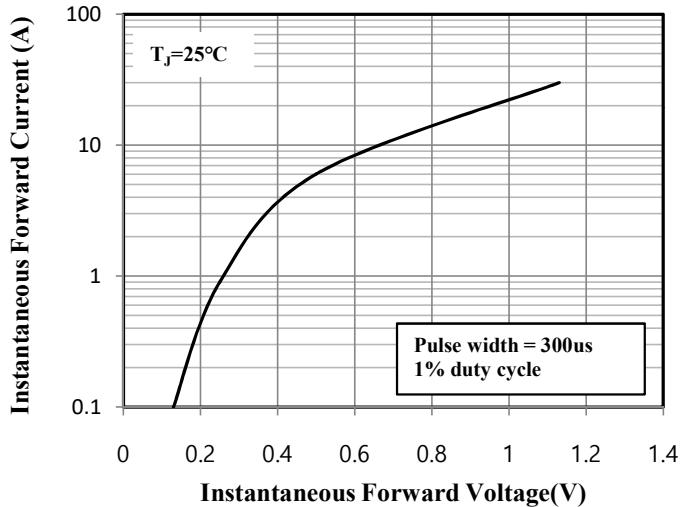


Fig.5 Typical Reverse Characteristics

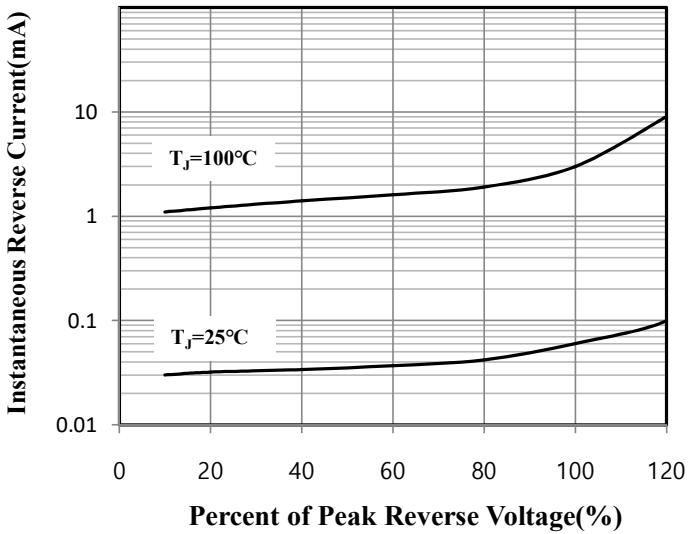


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

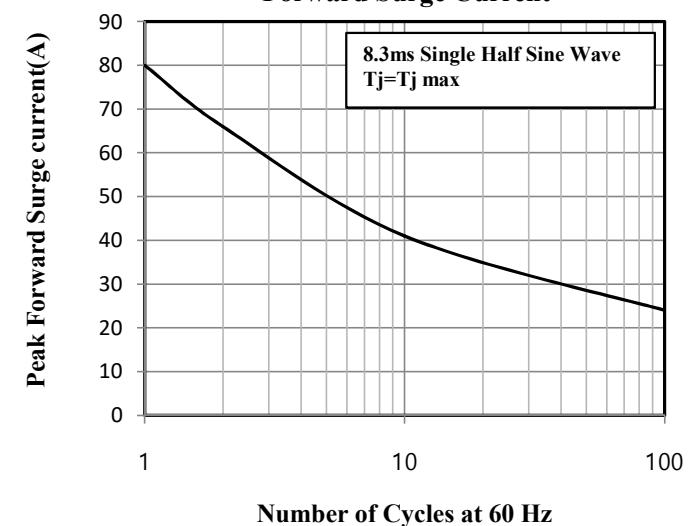


Fig.4 Typical Junction Capacitance

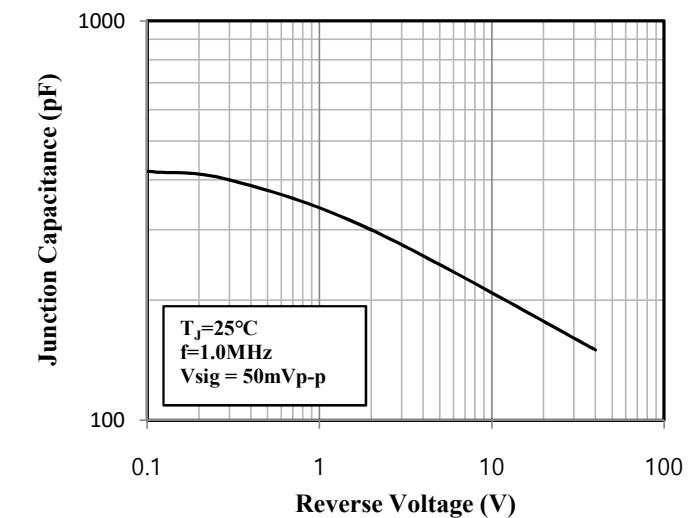


Fig.6 Typical Transient Thermal Impedance

