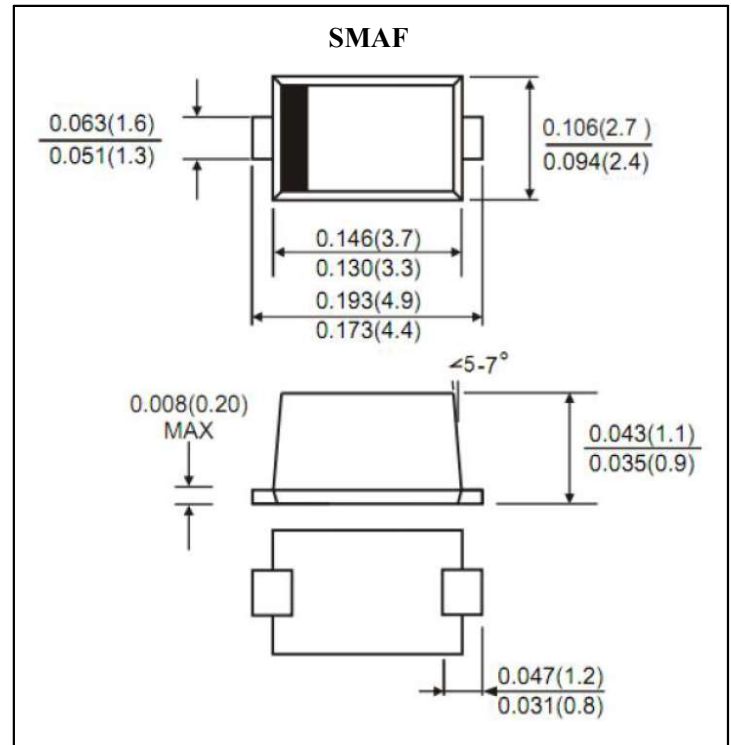
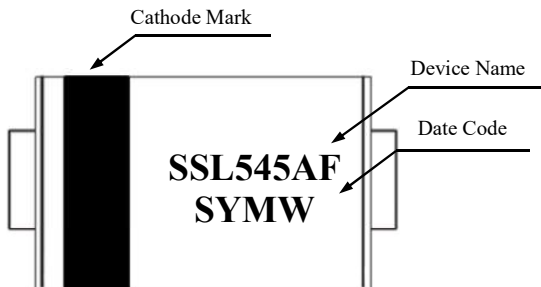


**Surface Mount Low VF Schottky Barrier Rectifier**  
**Reverse Voltage 45 Volts, Forward Current 5.0 Amperes**
**Features**

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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)	$I_F(AV)$	5.0	A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	120	A	
Maximum Instantaneous Forward Voltage @ 5.0A	$V_F$	0.5	V	Note 1
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5	mA	$T_a=25^{\circ}C$
		20	mA	$T_a=100^{\circ}C$
Typical Thermal Resistance	$R_{th(j-a)}$	20	$^{\circ}C/W$	Note 2
Operation Junction Temperature Range	$T_J$	-55 to +125	$^{\circ}C$	
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$	

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

Note 2. Mount on Cu-Pad Size 0.2×0.2"(5.0 mm×5.0 mm) on P.C.B.



Ratings and Characteristics Curves ( $T_a=25^\circ\text{C}$  unless otherwise noted)

Fig.1 Forward Current Derating Curve

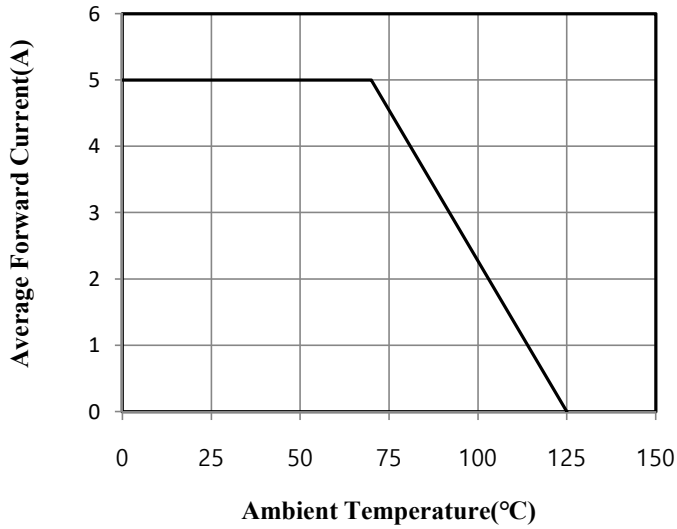


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

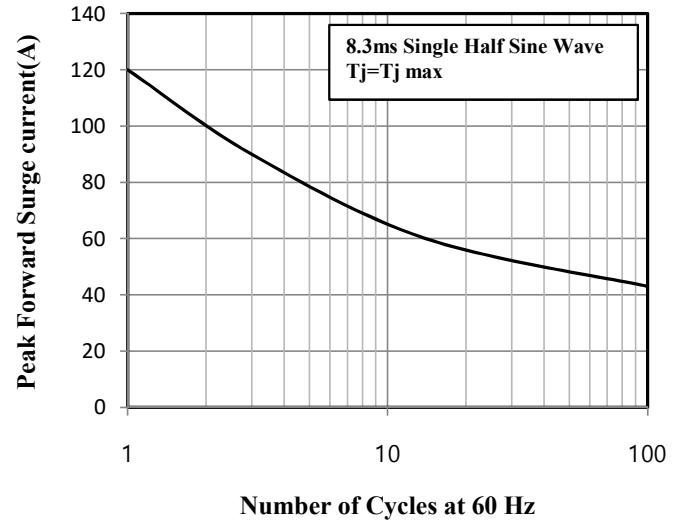


Fig.3 Typical Instantaneous Forward Characteristics

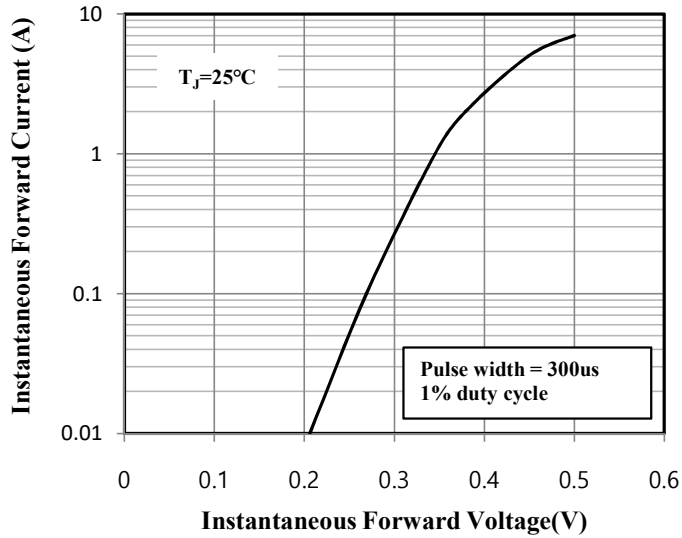


Fig.4 Typical Reverse Characteristics

