5A, 100V Low Forward Voltage Schottky Rectifier

FEATURES

- Trench MOS Schottky barrier diode
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260℃/10 seconds
- RoHS compliant
- Halogen-free according to IEC 61249-2-21 definition

SMAF

RoHS COMPLIANT

HALOGEN FREE

MECHANICAL DATA

- Case: SMAF
- Case material: molding compound meets UL 94V-0 flammability rating
- Polarity: color band denotes cathode end

TYPICAL APPLICATION

It's designed to meet the general requirements of commercial applications such as SMPS, adapter, charger, home appliance and lighting.

MAXIMUM RATINGS

T_A=25℃ unless otherwise noted

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current (8.3 ms single half sine-wave supe rimposed on rated load)	I_{FSM}	80	A
Operating Junction Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

ELECTRICAL CHARACTERISICS

T_A=25℃ unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@I_F=5A	T_A=25℃	V_F	0.66	0.7	V
	T_A=125℃		0.6	0.63	
Reverse Current @V_{RRM}	T_A=25℃	I_R	15	50	uA
	T_A=125℃		10	35	mA
Typical Thermal Resistance		$R_{\theta JA}$	85		℃/W

RATINGS AND CHARACTERISTIC CURVES

T_A=25℃ unless otherwise noted

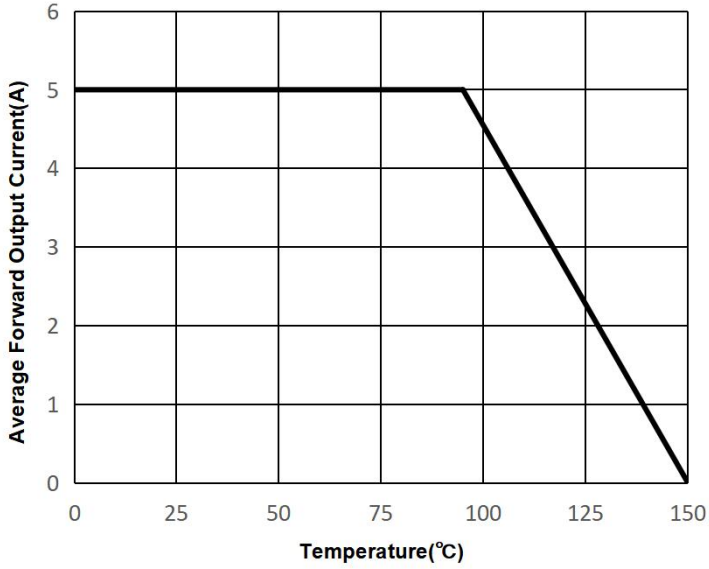### FIG.1: Forward Output Current Derating Curve

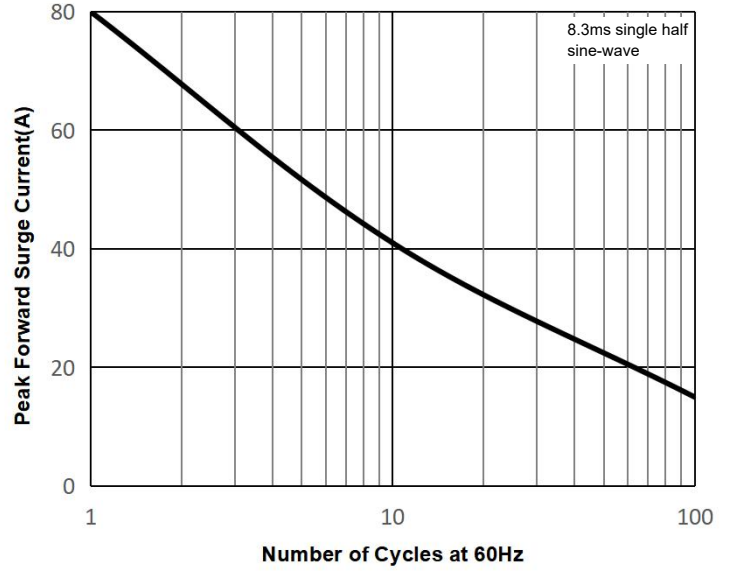### FIG.2: Maximum Non-Repetitive Peak Forward Surge Current
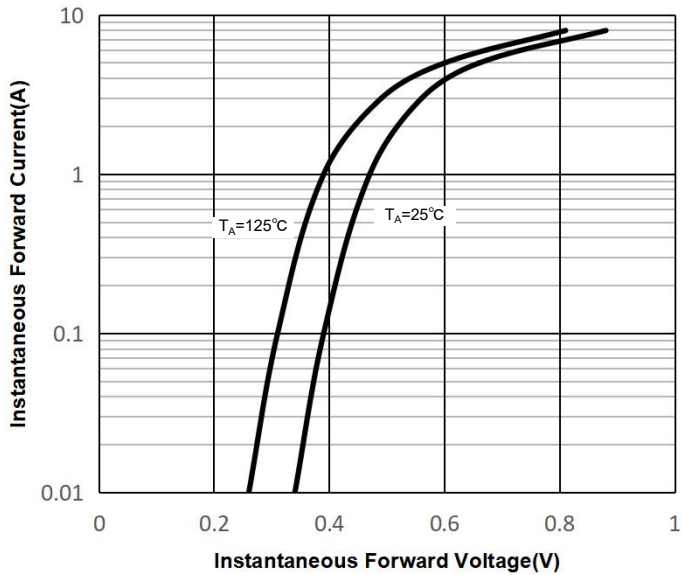

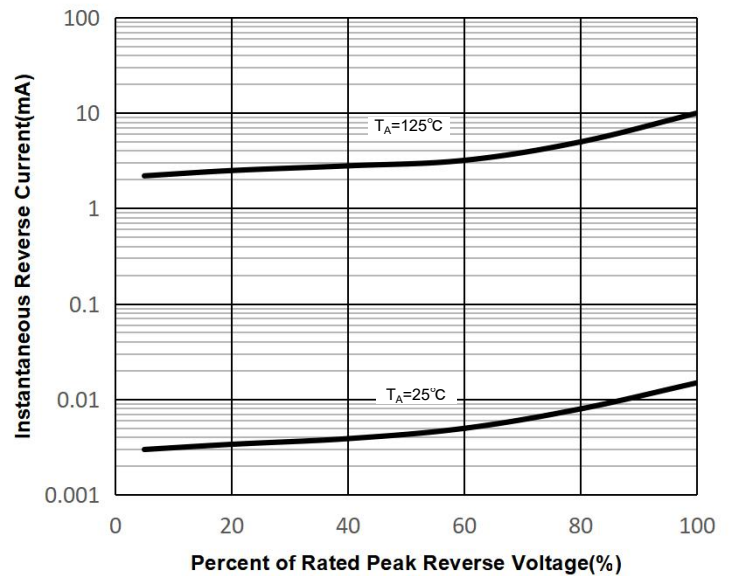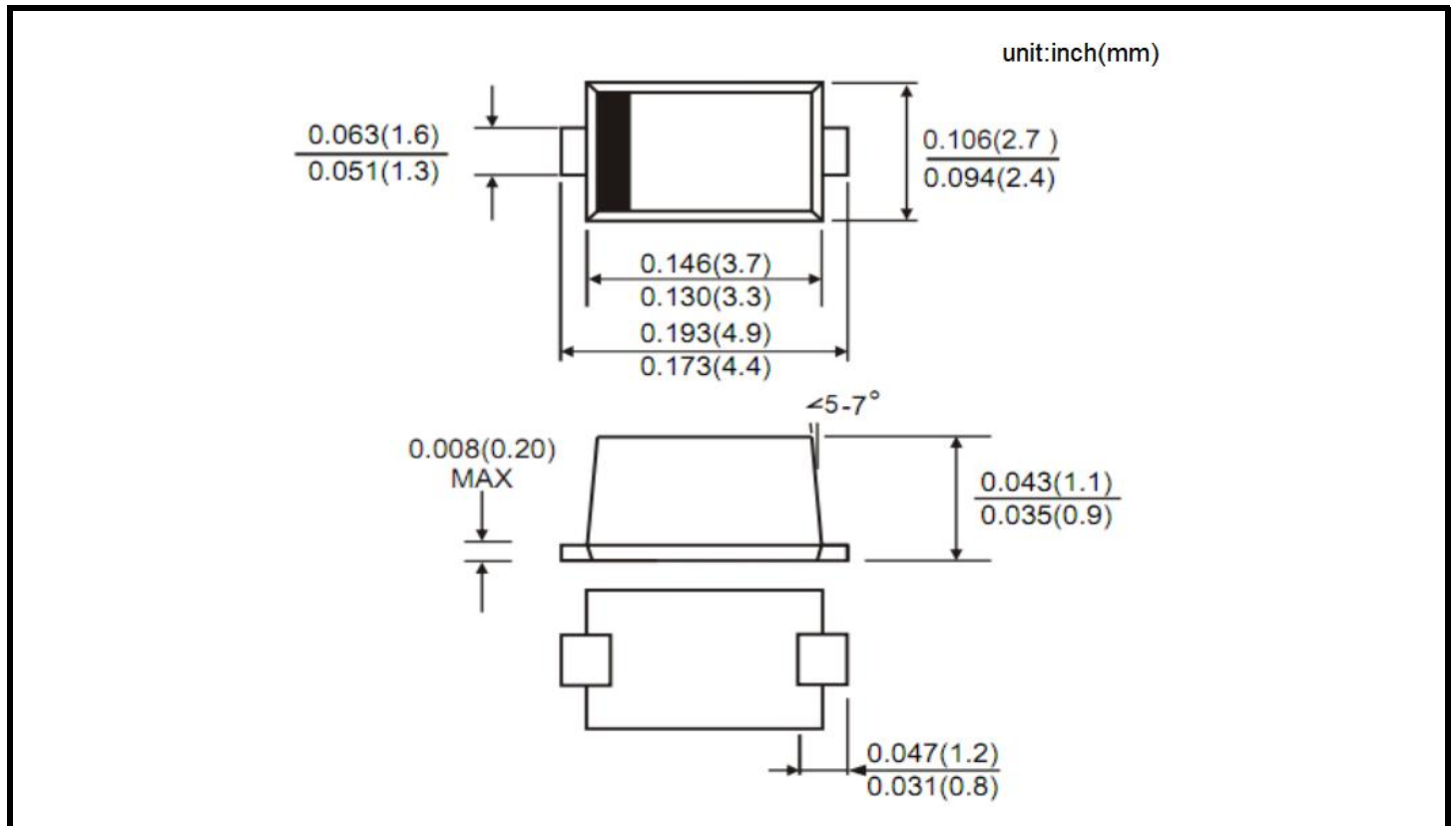### FIG.3: Typical Forward Characteristics

FIG.4: Typical Reverse Characteristics

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PACKAGE OUTLINE DIMENSIONS

PACKING INFORMATION

Package	Reel(PCS)	Inner Box(PCS)	Carton(PCS)
SMAF	3,000	15,000	60,000