

# 60A, 45V Low Forward Voltage Schottky Rectifier

## FEATURES

- Planar MOS schottky barrier diode
- Low forward voltage drop
- High temperature soldering guaranteed: 270°C/10 seconds
- RoHS compliant

## MECHANICAL DATA

- Case: TO-247
- Case material: molding compound meets UL 94V-0 flammability rating
- Polarity: as marked on case body

## TYPICAL APPLICATION

General purpose use in AC to DC bridge full wave rectification for SMPS, lighting, adapter, charger, home appliance, office equipment and telecommunication.

## MAXIMUM RATINGS

T<sub>A</sub>=25°C unless otherwise noted

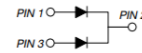
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	45	V
Average Forward Rectified Current	I <sub>F(AV)</sub>	60	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	400	A
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

## ELECTRICAL CHARACTERISTICS

T<sub>A</sub>=25°C unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@I <sub>F</sub> =30A	T <sub>A</sub> =25°C	V <sub>F</sub>	0.5	0.54	V
	T <sub>A</sub> =125°C		0.42	0.46	V
Reverse Current @V <sub>RRM</sub>	T <sub>A</sub> =25°C	I <sub>R</sub>	100	300	µA
	T <sub>A</sub> =125°C		60	150	mA
Typical Thermal Resistance		R <sub>θJC</sub>	0.9		°C/W

TO-247



RoHS  
COMPLIANT

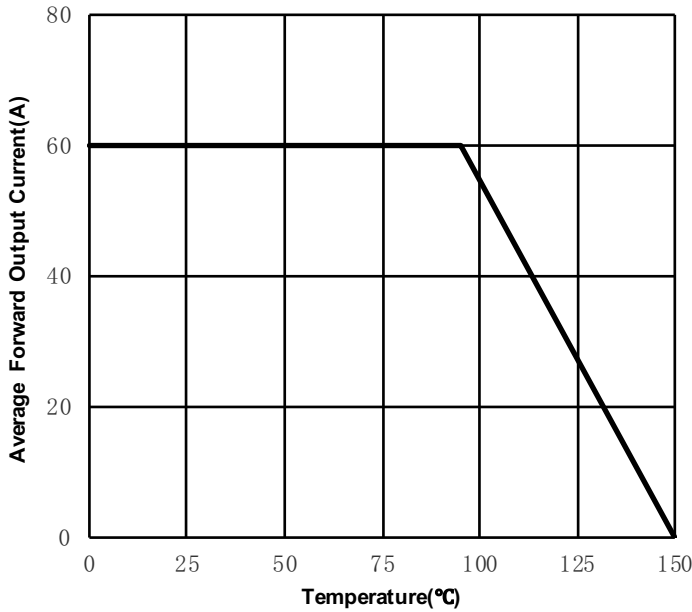
HALOGEN  
FREE  
AVAILABLE

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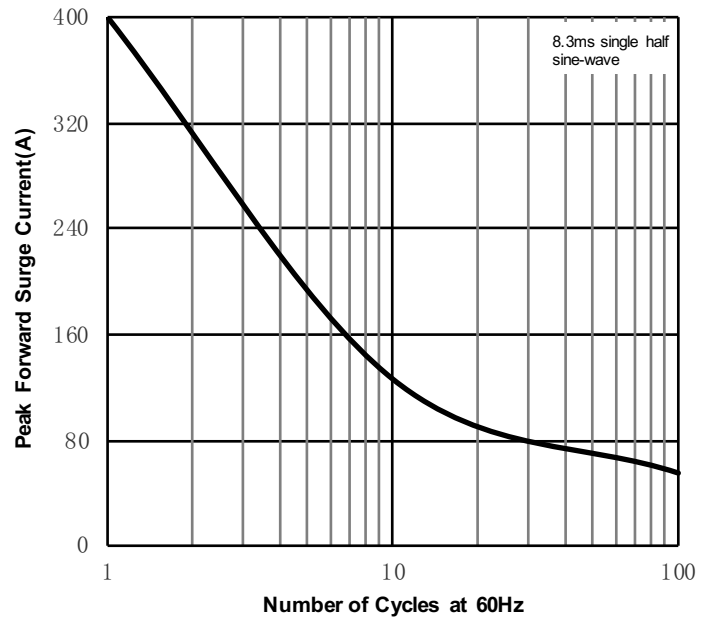
## RATINGS AND CHARACTERISTIC CURVES

T<sub>A</sub>=25°C unless otherwise noted

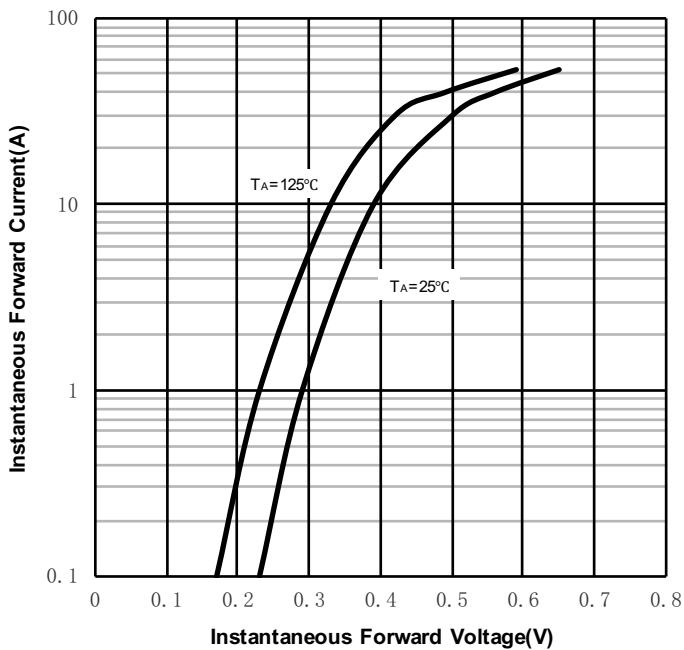
**FIG.1: Forward Output Current Derating Curve**



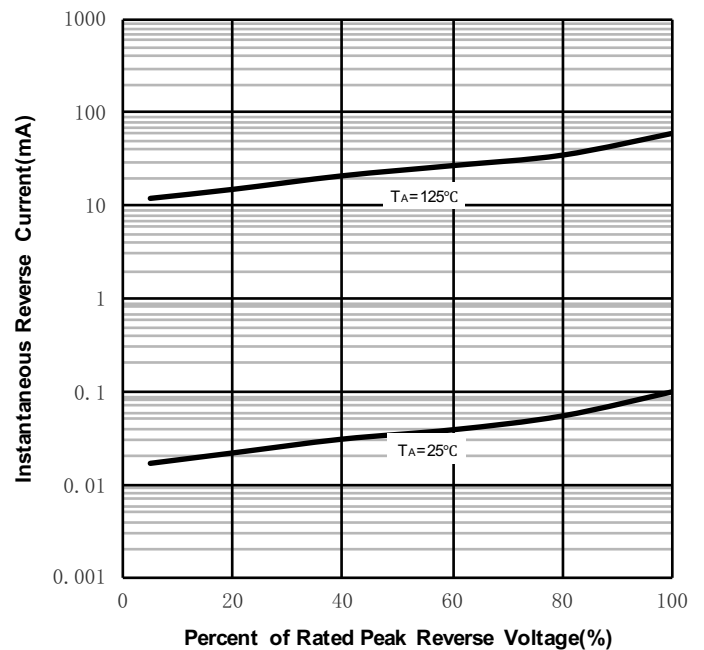
**FIG.2: Maximum Non-Repetitive Peak Forward Surge Current**



**FIG.3: Typical Forward Characteristics**

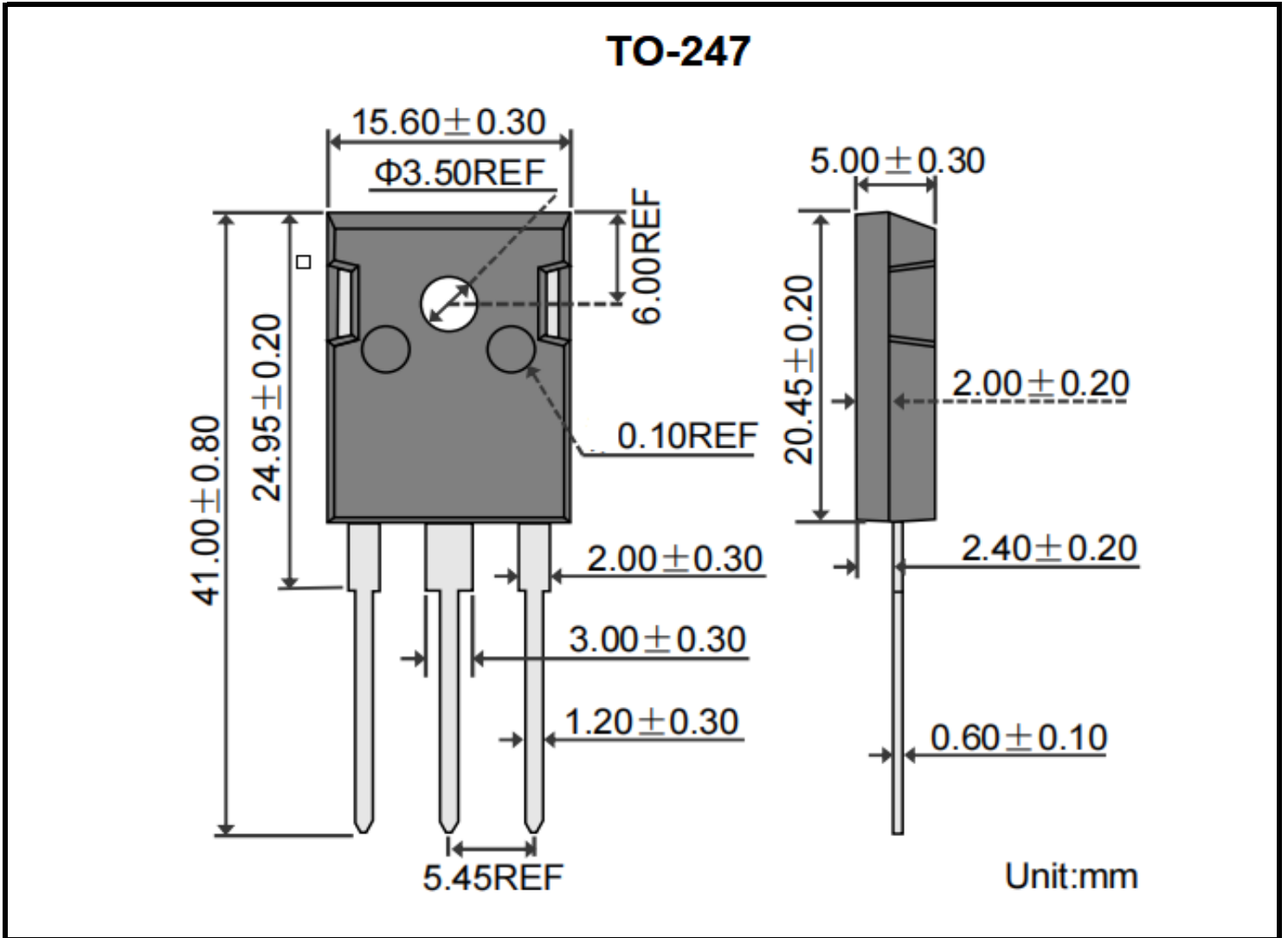


**FIG.4: Typical Reverse Characteristics**



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## PACKAGE OUTLINE DIMENSIONS



## PACKING INFORMATION

Package	Tube(PCS)	Inner Box(PCS)	Carton(PCS)
TO-247	30	360	1,800