

60A, 300V 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_A=25°C unless otherwise noted

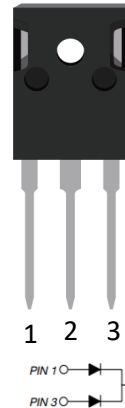
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	300	V
Average Forward Rectified Current	I _{F(AV)}	60	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	400	A
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

T_A=25°C unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@I _F =5A	T _A =25°C	V _F	0.74	0.78	V
	T _A =125°C		0.63	0.66	
Forward Voltage@I _F =30A	T _A =25°C		0.95	0.99	
	T _A =125°C		0.8	0.84	
Reverse Current @V _{RRM}	T _A =25°C	I _R	1	10	uA
	T _A =125°C		600	5000	
Typical Thermal Resistance		R _{θJC}	0.9		°C/W

TO-247



RoHS
COMPLIANT

HALOGEN
FREE
AVAILABLE

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RATINGS AND CHARACTERISTIC CURVES

T_A=25°C unless otherwise noted

FIG.1: Forward Output Current Derating Curve

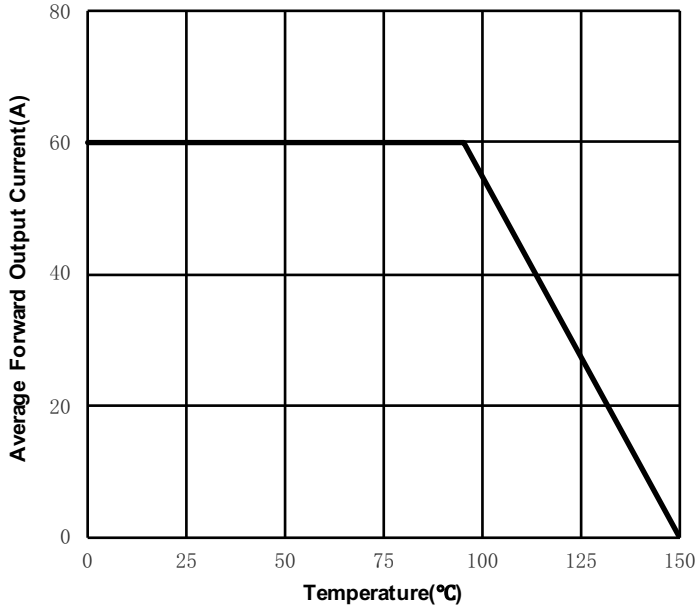


FIG.2: Maximum Non-Repetitive Peak Forward Surge Current

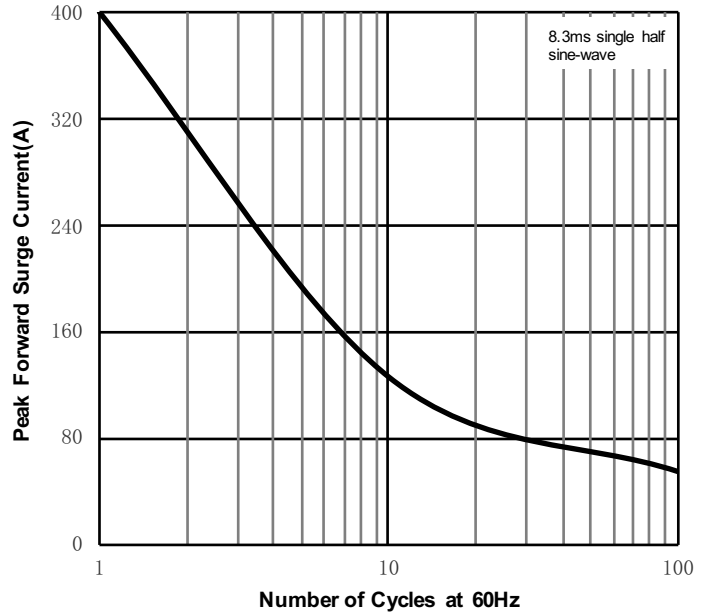


FIG.3: Typical Forward Characteristics

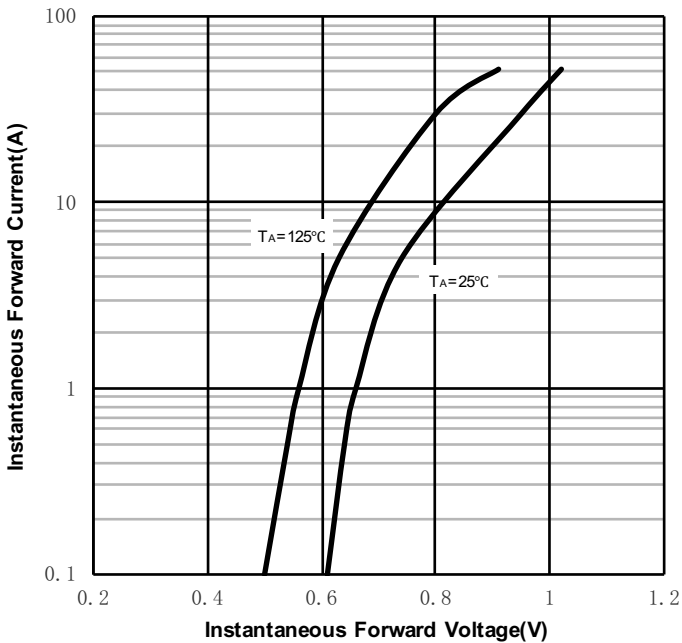
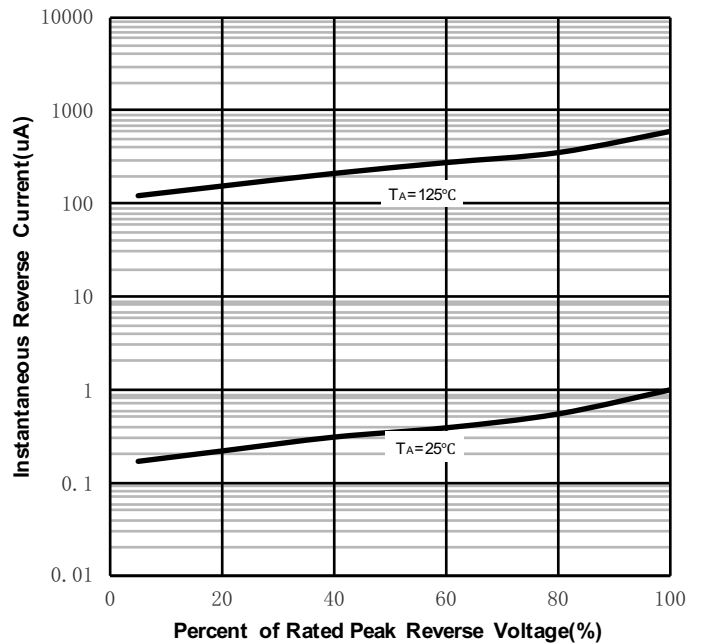
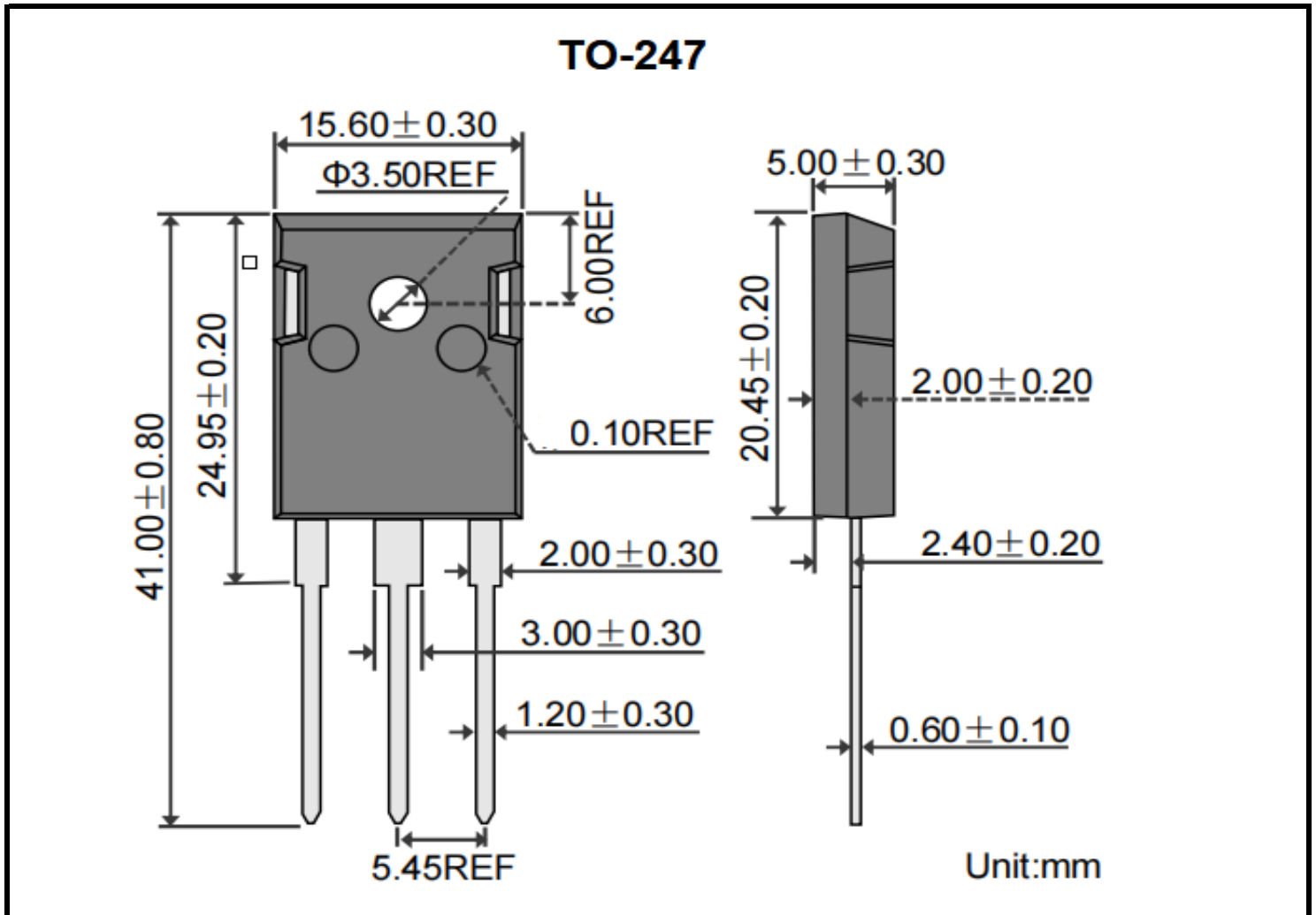


FIG.4: Typical Reverse Characteristics



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PACKAGE OUTLINE DIMENSIONS



PACKING INFORMATION

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