

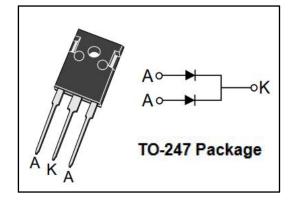
## **INCHANGE SEMICONDUCTOR**

# **Schottky Barrier Rectifier**

# STPS60SM200C

### FEATURES

- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majorty carrier conduction
- Low Power Loss, High Efficiency
- Guard ring for transient protection
- High Surge Capability, High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



#### **APPLICATIONS**

• For use in low voltage ,high frequency inverters,free wheeling and polarity protection applications.

SYMBOL	PARAMETER	VALUE	UNIT
Vrrm Vrwm Vr	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I <sub>F(RMS)</sub>	Forward current RMS	50	А
I <sub>F(AV)</sub>	Average Rectified Forward Current @Tc=150°C	60	А
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	500	A
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Current (20 μ s, 1.0kHz)	1.0	A
TJ	Junction Temperature	-40~150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C

#### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

isc website: www.iscsemi.com



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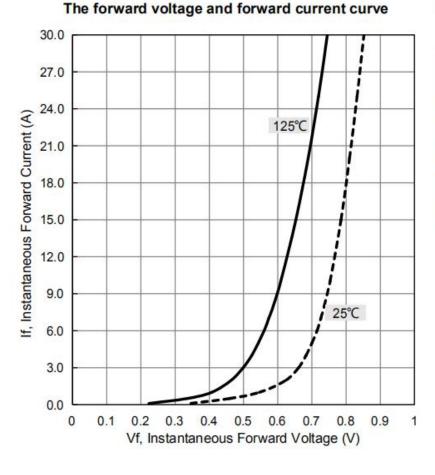
## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.5	°C/W

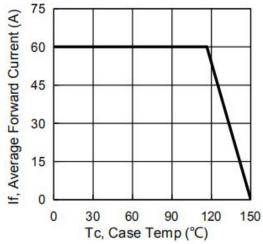
#### ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 µ s,Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
		I⊧= 30A ; Tc= 25 ℃	0.90	
		IF= 30A ; Tc= 125℃	0.85	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM;</sub> Tc= 25℃	0.05	mA
		V <sub>R</sub> = V <sub>RWM;</sub> Tc= 125°C	13.0	

## **Characteristic Curves**



### Current derating curve, perelement



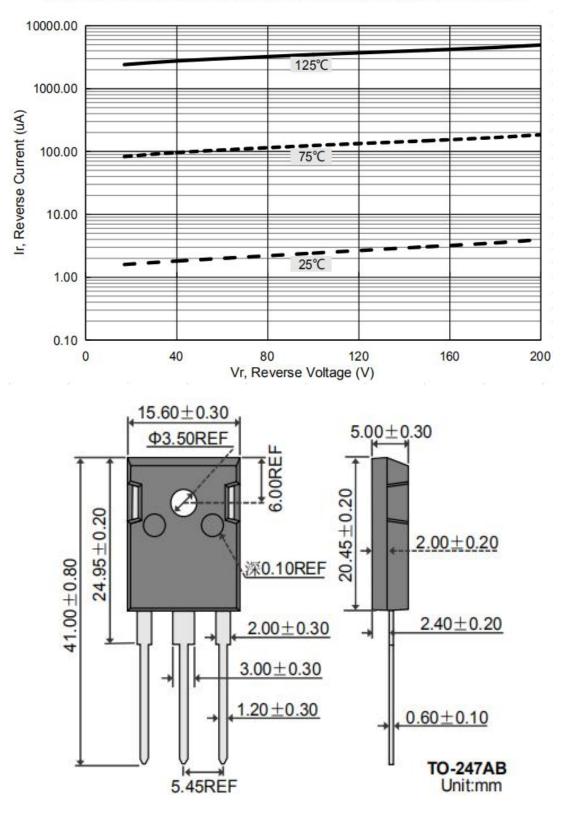
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The reverse leak current and the reverse voltage (single-device) curve.





## **Schottky Barrier Rectifier**

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