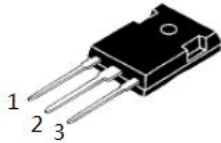
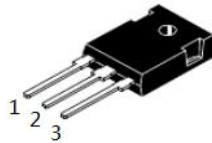




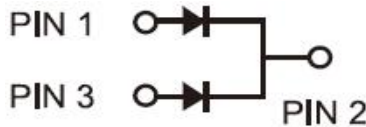
## SCHOTTKY BARRIER RECTIFIER



TO-247/PT



TO-247S/PTS



## FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses. High efficiency
- Guarding for over voltage protection



**RoHS**  
COMPLIANT

## APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

## Primary Characteristic

$I_O$	2*30A
$V_{RRM}$	45V
$I_{FSM}$	450A
$V_F$	0.56V
$T_{Jmax}$	150°C
Assembly code	BY

## MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-B106

## Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45	V
Working Peak Reverse Voltage	$V_{RWM}$	45	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current	$I_O$	Per Leg	30
		Total	60
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	450	A
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

## Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit	
Forward Voltage Drop(Note2) at $I_F=30A$	$V_F$	Typ.	Max.	V	
		TA=25°C	0.56		0.61
		TA=125°C	0.51		-
Maximum Reverse Current at $V_R=45V$	$I_R$	TA=25°C	20	µA	
		TA=125°C	7	mA	

Note2:Pulse test: 300 µs pulse width, 1 % duty cycle



## RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

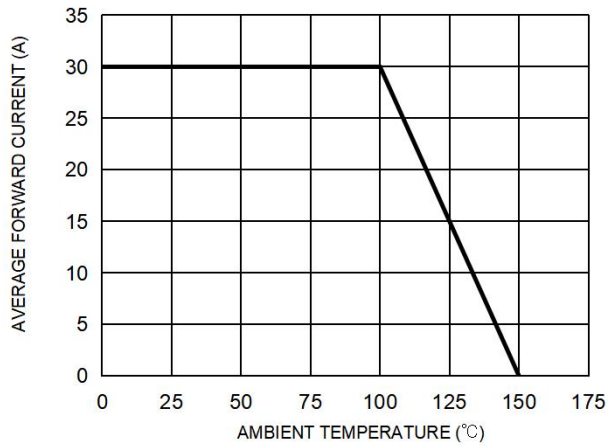


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

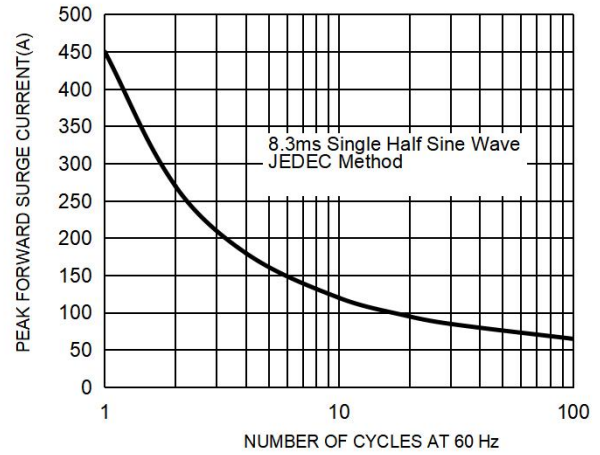


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

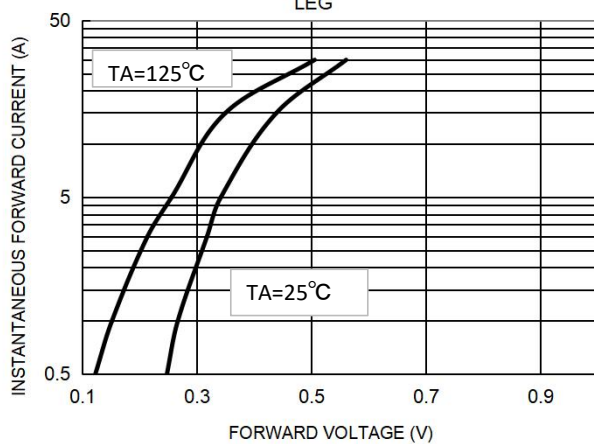
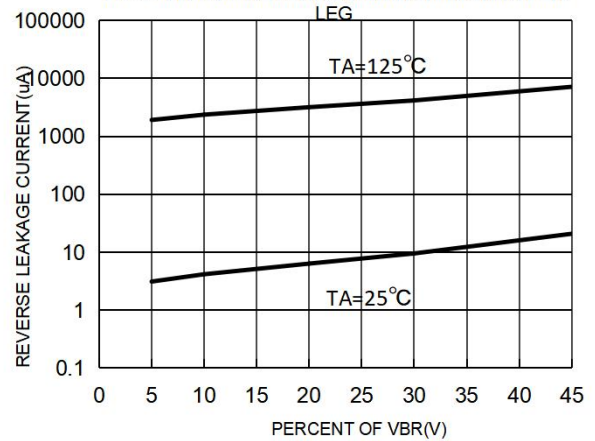


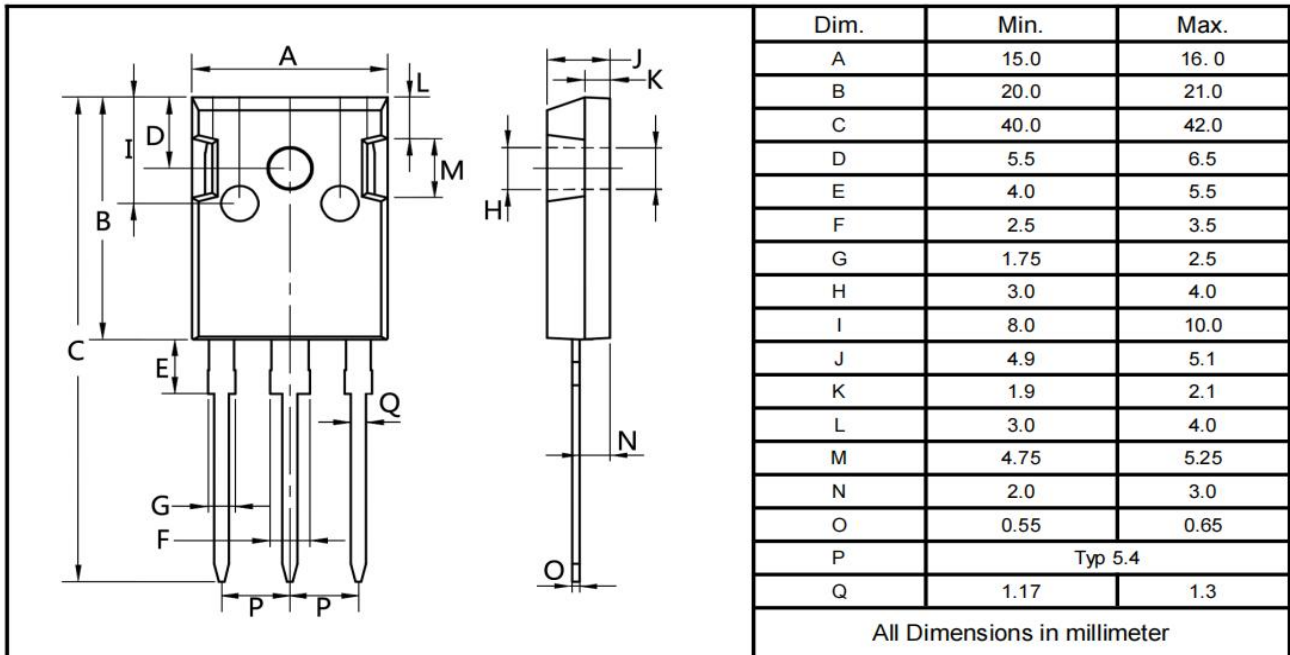
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



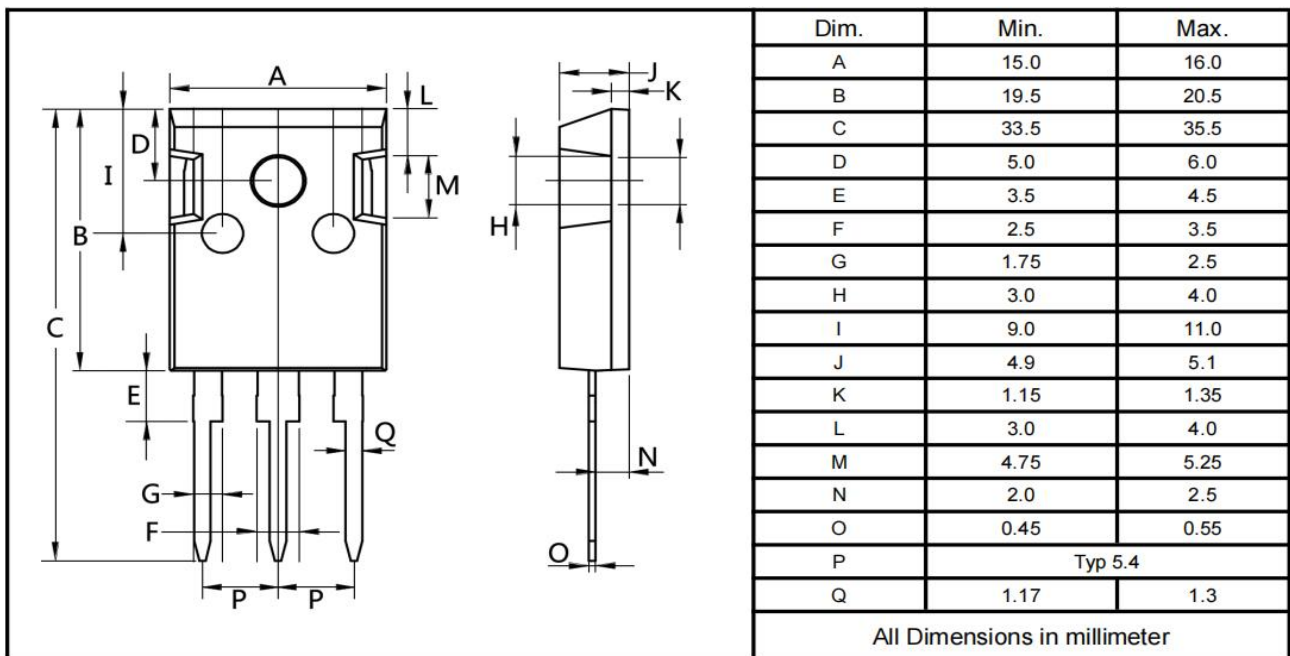


**Package Outline Dimensions millimeters**

**TO-247**

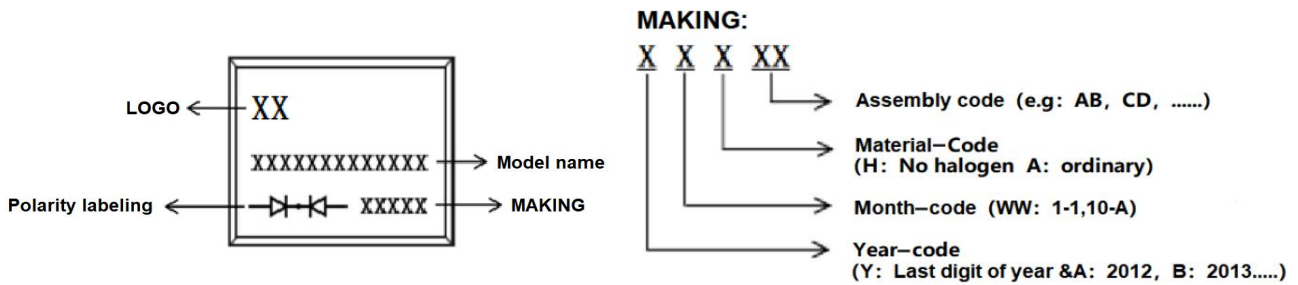


**TO-247S**





## Marking on the body

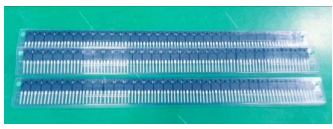




## Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR6045PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 3000pcs/carton
MBR6045PTS	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 3000pcs/carton

Note: For Halogen Free molding compound, add "H" suffix to part number above.

## packing instruction

PKG	最小包装	内盒	外箱
TO-247 TO-247S			
	30PCS/管	600pcs/盒	3000pcs/箱

### Notice

- All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.
- Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power;  
exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
- LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.