

# MBR60100PT/PTS

# SCHOTTKY BARRIER RECTIFIER





TO-247/PT

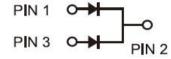
T<sub>J</sub>max

Assembly code

TO-247S/PTS

**150**℃

AB



# Io 2\*30A VRRM 100V IFSM 450A VF 0.69V

# FEATURES

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



### **APPLICATIONS**

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

#### **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  $^\circ\!\!\!\!^\circ C$  maximum,10s  $\,$  per JESD 22-B106  $\,$

5°C unless	otherwise specified		
Symbol	Value	Unit	
V <sub>RRM</sub>	100	V	
V <sub>RWM</sub>	100	V	
V <sub>DC</sub>	100	V	
	30	٨	
1 <sub>0</sub>	60	A	
I <sub>FSM</sub>	450	А	
TJ	150	C°	
T <sub>STG</sub>	-40 to +150	C°	
R <sub>θJC</sub>	2	°C/W	
	Symbol V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub> I <sub>0</sub> I <sub>FSM</sub> T <sub>J</sub> T <sub>STG</sub>	$\begin{tabular}{ c c c c c c c c } \hline V_{RRM} & 100 & & \\ \hline V_{RWM} & 100 & & \\ \hline V_{DC} & 100 & & \\ \hline I_0 & & & & \\ \hline I_0 & & & & & \\ \hline I_0 & & & & & & \\ \hline I_{FSM} & & & & & & \\ \hline I_{FSM} & & & & & & & \\ \hline I_{FSM} & & & & & & & \\ \hline I_{TJ} & & & & & & & \\ \hline I_{TJ} & & & & & & & \\ \hline I_{TJ} & & & & & & & & \\ \hline I_{TJ} & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & & & & & & \\ \hline I_{TSTG} & & & & & & & & & & & & & & & & & & &$	

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

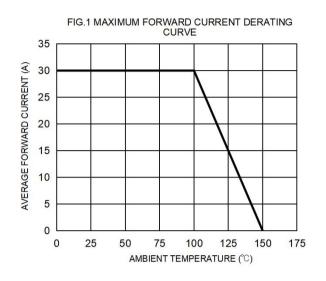
# Electrical Characteristics (Per Leg) unless otherwise specified

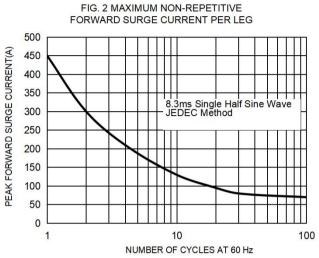
Characteristics		Symbol	Value		Unit	
Forward Voltage Drop(Note2)			Тур.	Max.		
at I <sub>F</sub> =5A	TA=25°C		0.60	-		
	TA=125°C		0.49	-		
at I <sub>F</sub> =10A	TA=25°C	V <sub>F</sub>	0.69	-	V	
	TA=125°C		0.56	-		
at I <sub>F</sub> =30A	TA=25°C		0.81	0.85		
	TA=125°C		0.69	-		
Maximum Reverse Current at V <sub>R</sub> =100V	TA=25°C	1	5	10	μA	
	TA=125°C	R	4	-	mA	

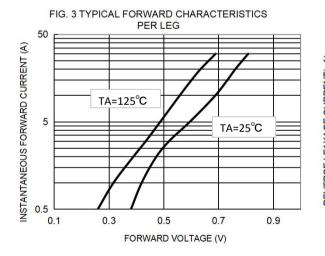
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

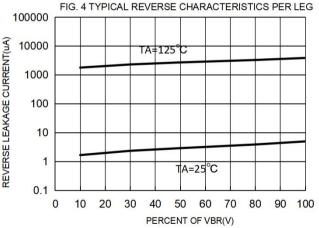


# RATINGS AND CHARACTERISTIC CURVES





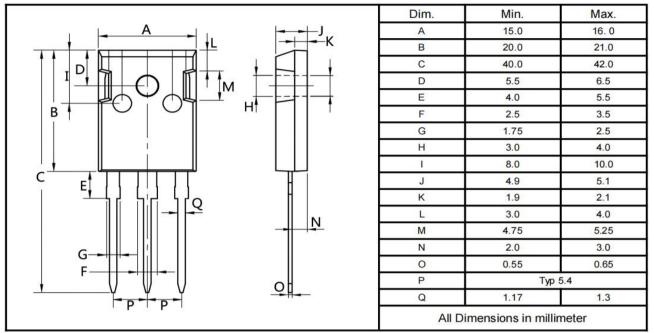




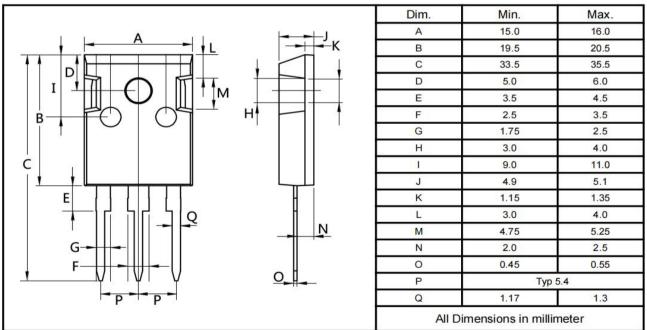


# Package Outline Dimensions millimeters

#### TO-247

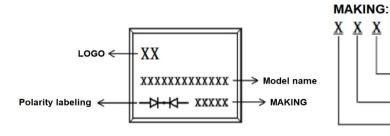


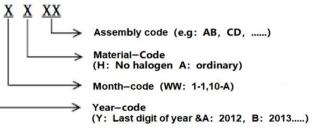
## TO-247S



# Marking on the body

# MBR60100PT/PTS



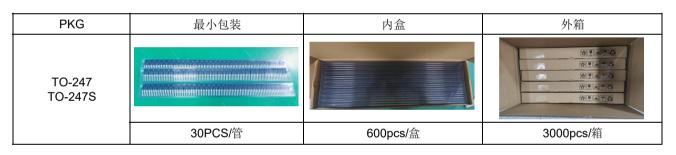


#### Ordering information

Cracing mon	lation			
Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR60100PT	00PT TO-247 0.209oz(5.93g)		30 pcs / tube	600pcs/box 3000pcs/carton
MBR60100PTS	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



#### Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

2. 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.

3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.