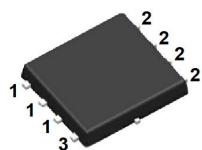
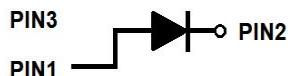


SCHOTTKY BARRIER RECTIFIER



PDFN5x6/GF



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 converters

Primary Characteristic

I_o	20A
V_{RRM}	200V
I_{FSM}	250A
V_F	0.89V
T_{Jmax}	150°C
Assembly code	AH

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 $T_a=25^\circ C$ unless otherwise specified

Characteristics	Symbol	Value		Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200		V
Working Peak Reverse Voltage	V_{RWM}	200		V
Maximum DC Blocking Voltage	V_{DC}	200		V
Maximum Average Forward Rectified Current	I_o	20		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	250		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)	V_F	Typ.	Max.	V
		0.80	-	
		0.68	-	
		0.87	0.92	
		0.76	-	
		1.00	1.20	
at $I_F=10A$		0.89	-	
		TA=25°C		
at $I_F=20A$		TA=125°C		
		TA=25°C		
		TA=125°C		
		TA=25°C		
Maximum Reverse Current at $V_R=200V$	I_R	TA=125°C		mA
		TA=25°C		

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

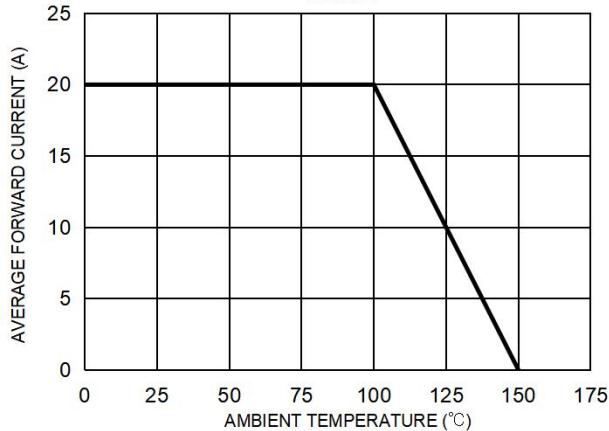


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

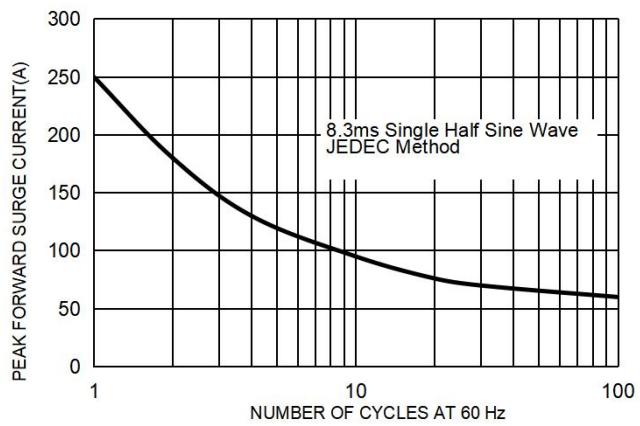


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

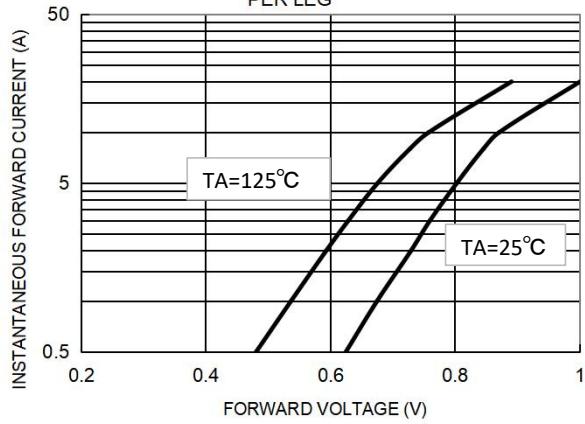
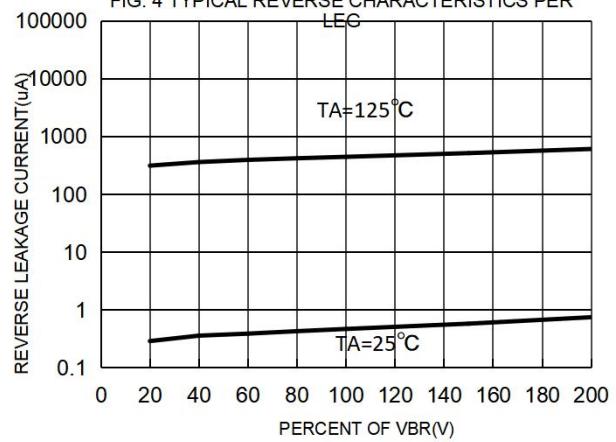
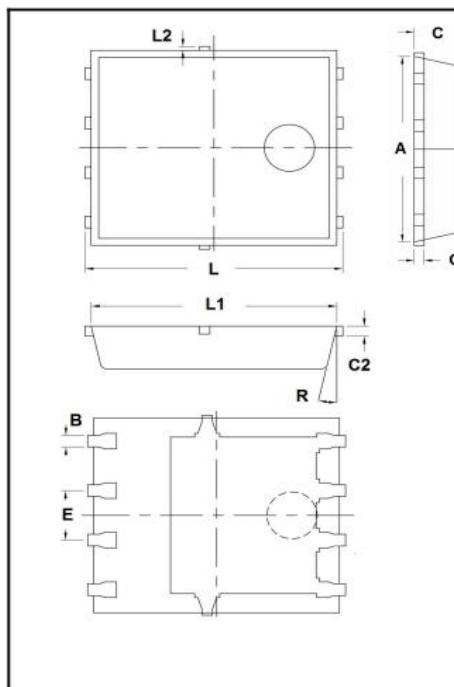


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Package Outline Dimensions millimeters

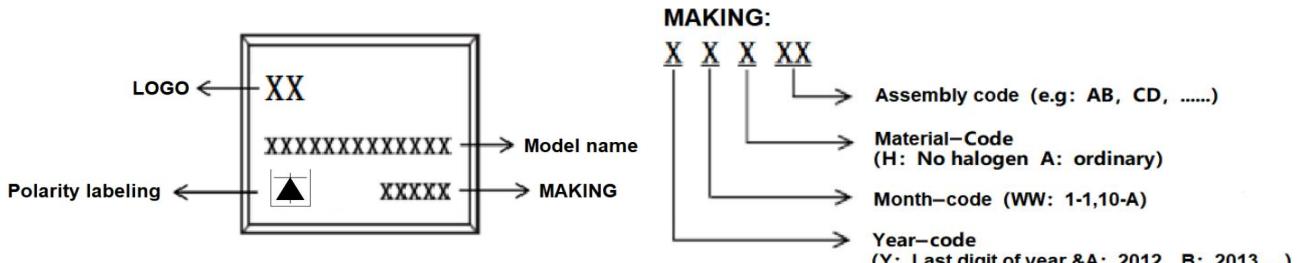
PDFN5x6



Dim.	Min.	Max.
A	4.8	5.2
B	0.25	0.35
C	1.0	1.2
C1	Typ 0.254	
C2	Typ 0.254	
E	Typ 1.27	
L	6.0	6.3
L1	5.7	6.0
L2	MAX 0.2	
R	Typ 13°	

All Dimensions in millimeter

Marking on the body



Ordering information

MBR20200GF	PDFN5x6	5000 pcs / reel	10000pcs/box 50000pcs/carton
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Note: For Halogen Free molding compound, add "H" suffix to part number above.

packing instruction

PKG	最小包装	内盒	外箱
PDFN5x6			
	5000pcs/盘	10000pcs/盒	50000pcs/箱

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.