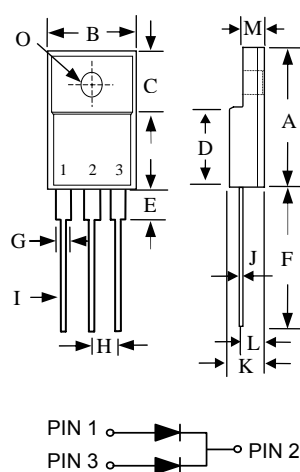# MBR30200L
Low VF Schottky Barrier Rectifiers

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

ITO- 220AB

ITO-220AB		
DIM.	MIN.	MAX.
A	14.90	15.90
B	9.90	10.40
C	6.45	7.15
D	7.85	8.75
E	2.90	3.90
F	12.8	——
G	1.10	1.4
H	2.35	2.55
I	0.45	0.95
J	0.40	0.65
K	4.35	4.75
L	2.55	3.15
M	2.60	3.10
O	∅3.00	∅3.50
All Dimensions in millimeter		

PIN 1
PIN 3
PIN 2

Maximum Ratings (Per Leg) at Ta=25°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	Per Leg	I_O	15	A
	Total		30	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave		I_{FSM}	380	A
Operating Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1) ITO-220AB		$R_{\theta JC}$	4	°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
			Typ.	Max.	
Forward Voltage Drop(Note2)					
at I_F=5A	TA=25°C	V_F	0.73	-	V
	TA=125°C		0.58	-	
at I_F=10A	TA=25°C		0.76	-	
	TA=125°C		0.62	-	
at I_F=15A	TA=25°C		0.84	0.89	
	TA=125°C		0.69	-	
Maximum Reverse Current at V_R=200V	TA=25°C	I_R	1.5	10	μA
	TA=125°C		1	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

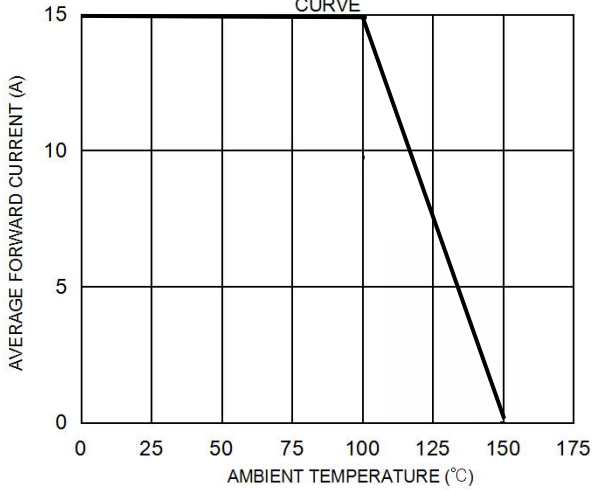FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

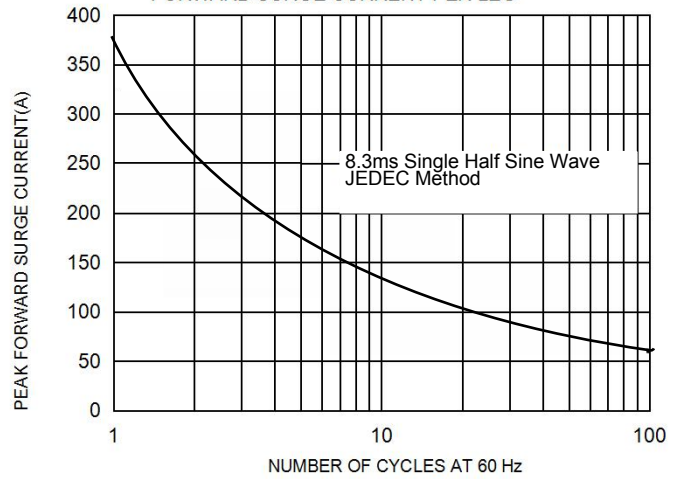FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

8.3ms Single Half Sine Wave
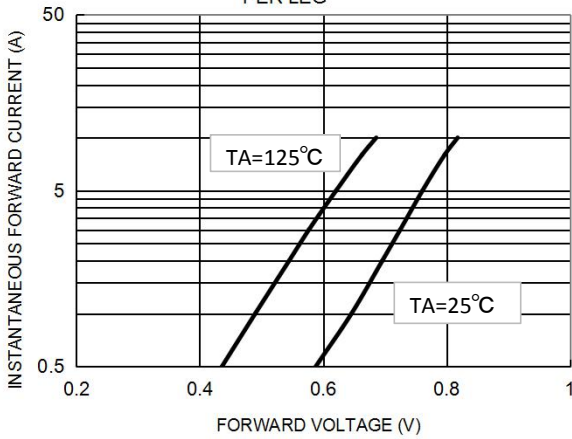JEDEC Method

FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

TA=125°C

TA=25°C

FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

TA=125°C

TA=25°C