MBR10200L

Low VF Schottky Barrier Rectifiers

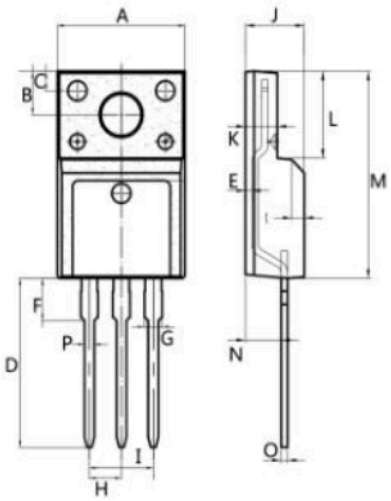
FEATURES

- 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-202, Method 208
- Polarity: As marked.
- Mounting Position: Any

ITO-220AB



Dim.	Min.	Max.
A	9.95	10.25
B	2.95	3.25
C	1.25	1.45
D	12.95	13.25
E	0.50	0.65
F	3.1	3.3
G	1.30	1.45
H	Typ 2.54	
I	Typ 5.08	
J	4.60	4.75
K	2.50	2. 65
L	6.35	6.55
M	15.4	16.0
N	2.75	3.05
O	0.48	0.52
P	0.76	0.84
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

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	10	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	160	A
Operating Temperature Range	T_J	-50 to +175	°C
Storage Temperature Range	T_{STG}	-50 to +175	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	4	°C/W

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ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Typ.	Max.	
at I_F=3A	TA=25°C	V_F	0.73	-	V
	TA=125°C		0.58	-	
at I_F=5A	TA=25°C		0.77	0.82	
	TA=125°C		0.62	-	
at I_F=10A	TA=25°C		0.84	0.89	
	TA=125°C		0.71	-	
Maximum Reverse Current at V_R=200V	TA=25°C	I_R	1	10	μA
	TA=125°C		0.3	-	mA

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

RATING AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

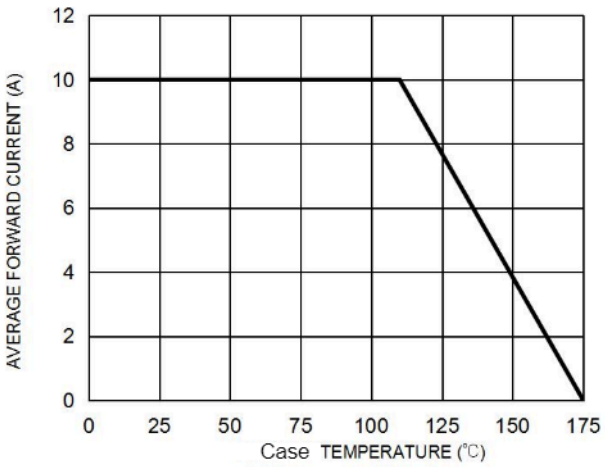

FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

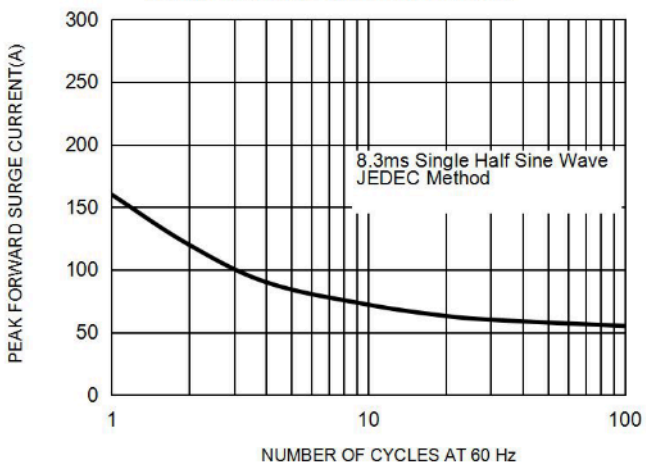

FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

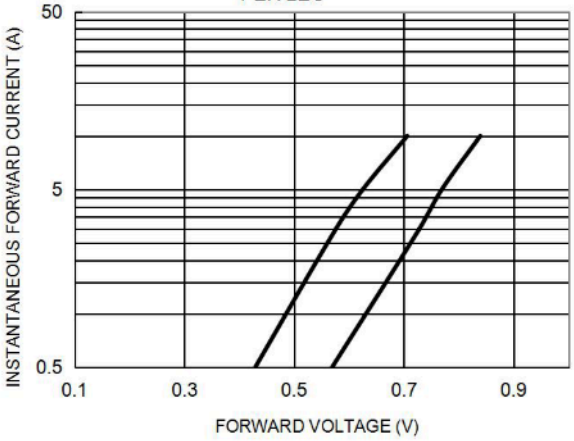

FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG