



MBR20100

Low VF Schottky Barrier Rectifiers

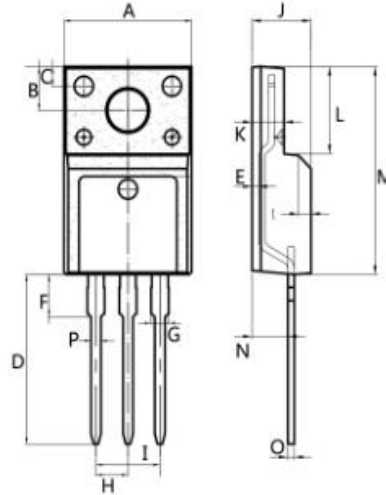
ITO-220AB

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 polarity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

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



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 (Per Leg) @T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	100	V
Maximum rms voltage	V _{RMS}	70	V
Maximum average forward rectified current	I _{F(AV)}	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Typical junction capacitance (V _R =4V, f=1MHz)	C _J	620	pF
Typical thermal resistance per diode (Note 1) TO-220	R _{θJC}	2	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C

Note : 1. Mounted on infinite heatsink.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V _{BR}	I _R =0.5mA	100	-	-	V
Instantaneous forward voltage per diode	V _F	I _F =3A	-	0.47	-	V
		I _F =5A	-	0.53	-	
		I _F =10A	-	0.67	0.75	
		I _F =3A	-	0.4	-	V
		I _F =5A	-	0.49	-	
		I _F =10A	-	0.61	-	
Reverse current per diode	I _R	V _R =70V	-	5	-	μA
		V _R =100V	-	-	50	μA
		T _J =25°C	-	-	-	mA
		T _J =125°C	-	7.2	-	



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

