

MBR1040FW Thru MBR10H200FW

List

List.....	1
Package outline.....	2
Features.....	2
Mechanical data.....	2
Maximum ratings and electrical characteristics	2
Rating and characteristic curves.....	3
Pinning information.....	4
Marking.....	4
Tube packing.....	4
Suggested thermal profiles for soldering processes.....	5

MBR1040FW Thru MBR10H200FW

10.0A Power Schottky Barrier Rectifiers : 40V ~ 200V

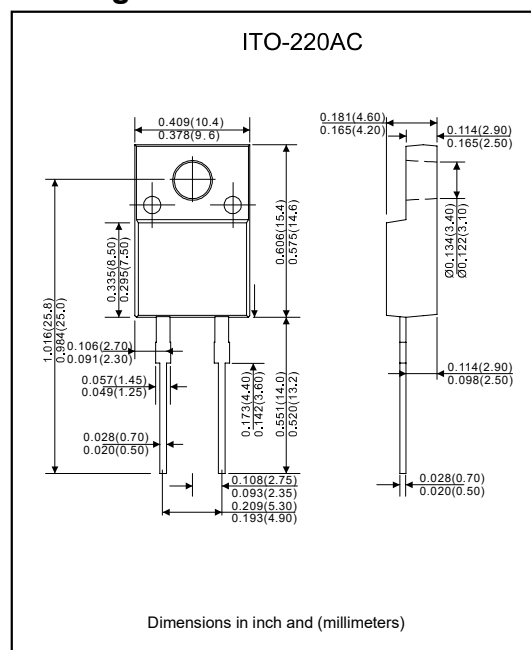
Features

- Low power loss.
- Low stored charge majority carrier conduction.
- High efficiency operation.
- High forward surge capability.
- Lead free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen-free parts, ex. MBR1040FW-H.

Mechanical data

- Circuit figure : Single positive.
- Leads : Solder able per mil-std-202, Method 208.
- Polarity : As marked.
- Case : Molded plastic , ITO-220AC.
- Mounting torque : 5 in-lbs maximum.
- Terminals : Puretin plated.
- Weight : 1.65 grams.

Package outline



Maximum ratings and electrical characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

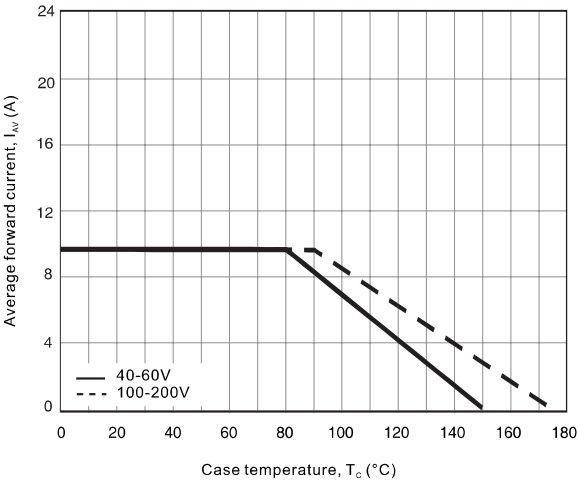
Parameter	Symbol	MBR 1040FW	MBR 1045FW	MBR 1060FW	MBR 10100FW	MBR 10H150FW	MBR 10H200FW	Unit
Repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	V
RMS voltage	V _{RMS}	28	32	42	70	105	140	V
DC blocking voltage	V _{DC}	40	45	60	100	150	200	V
Maximum average forward rectified current	I _(AV)	10						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	125						A
Maximum instantaneous forward voltage at I _F =10.0A	V _F	0.65		0.75	0.85	0.92		V
Maximum DC reverse current (T _J =25°C)	I _R	0.1			0.01			mA
At rated DC blocking voltage (T _J =125°C)		15			5			
Typical thermal resistance (Note1)	R _{θJC}	4.5						°C/W
Operating junction temperature	T _J	+150				+175		°C
Storage temperature range	T _{STG}	-55 to +175						°C

Note: 1. Thermal resistance from junction to case.

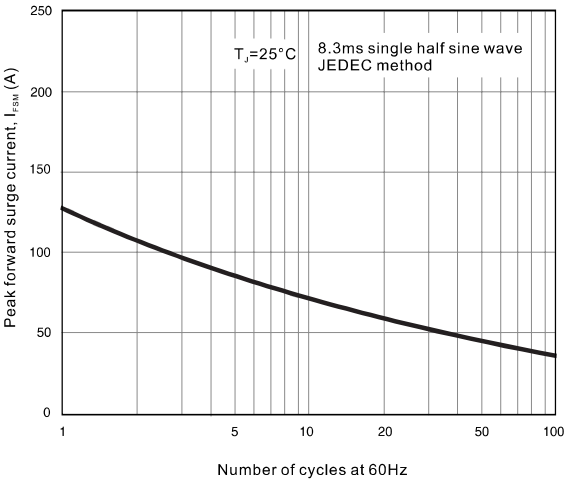
MBR1040FW Thru MBR10H200FW

Rating and characteristic curves

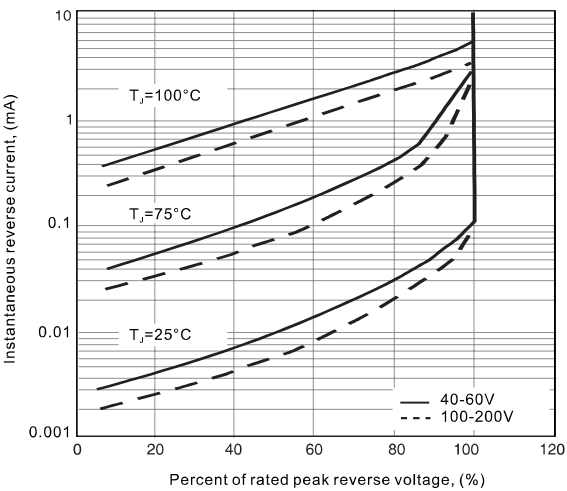
Typical forward current derating curve



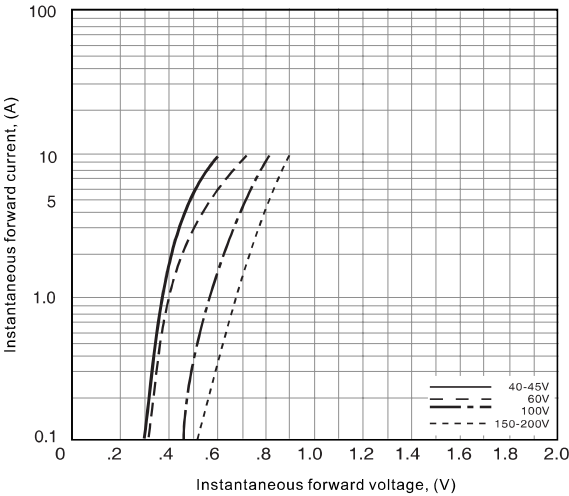
Maximum non-repetitive forward surge current



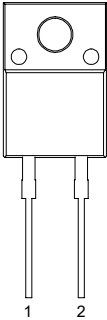
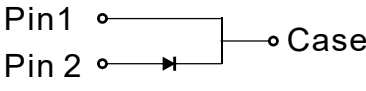
Typical reverse characteristics



Typical instantaneous forward characteristics



MBR1040FW Thru MBR10H200FW**Pinning information**

Pin	Simplified outline	Symbol
Pin1 Cathode Pin2 Anode		

Marking

Type number	Marking code
MBR1040FW	MBR1040F
MBR1045FW	MBR1045F
MBR1060FW	MBR1060F
MBR10100FW	MBR10100F
MBR10H150FW	MBR10150F
MBR10H200FW	MBR10200F

Tube packing

PACKAGE	TUBE (pcs)	TUBE SIZE (m/m)	BOX (pcs)	INNER BOX (m/m)	CARTON SIZE (m/m)	CARTON (pcs)
ITO-220AC	50	525*31.9*6.4	1000	545*150*45	575*245*170	5,000

MBR1040FW Thru MBR10H200FW**Suggested thermal profiles for soldering processes**

1. Lead free temperature profile wave-soldering

