MBR1020F THRU MBR10200F

10.0AMP. SCHOTTKY BARRIER RECTIFIERS

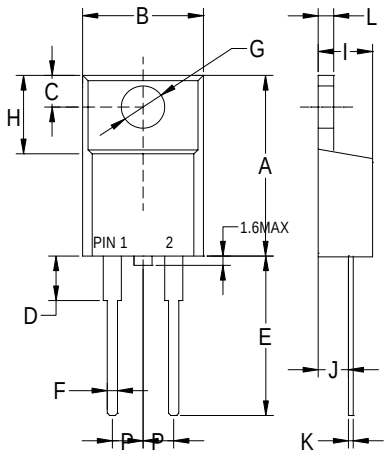
FEATURE

- .High current capability,
- .Low forward voltage drop
- .Low power loss, high efficiency
- .High surge capability
- .High temperature soldering guaranteed 260°C /1 0sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

- .Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- .Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- .Polarity: color band denotes cathode
- .Mounting position: any

ITO-220A



Dim	Min	Max
A	14.5	15.5
B	---	10.3
C	2.80	3.2
D	---	4.1
E	13.0	14.0
F	0..5	0.78
G	2.9	3.5
H	6.8	7.4
I	4.1	4.7
K	0.5	0.7
L	2.46	2.86
P	2.25	2.85

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Type Number	SYMBOL	MBR 1020F	MBR 1030F	MBR 1040F	MBR 1050F	MBR 1060F	MBR 1080F	MBR 10100F	MBR 10150F	MBR 10200F	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Tc=90 ℃	$I_{F(AV)}$	10.0									A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	175									A
Maximum Forward Voltage at 10.0A DC	V_F	0.55			0.70		0.85		0.95		V
Maximum DC Reverse Current@Ta =25℃	I_R	1.0					0.5				mA
at rated DC blocking voltage @Ta =100℃		50.0					40.0				mA
Typical Junction Capacitance (Note1)	C_J	600					250				pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	3.0									℃/W
Storage Temperature	T_{STG}	-55 to +150									°C
Operating Junction Temperature	T_J	-55 to +125			-55 to +150						°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (MBR1020F THRU MBR10200F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

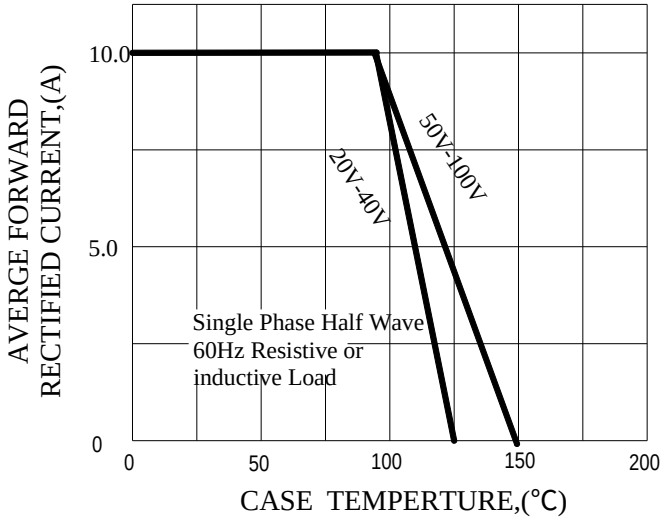


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

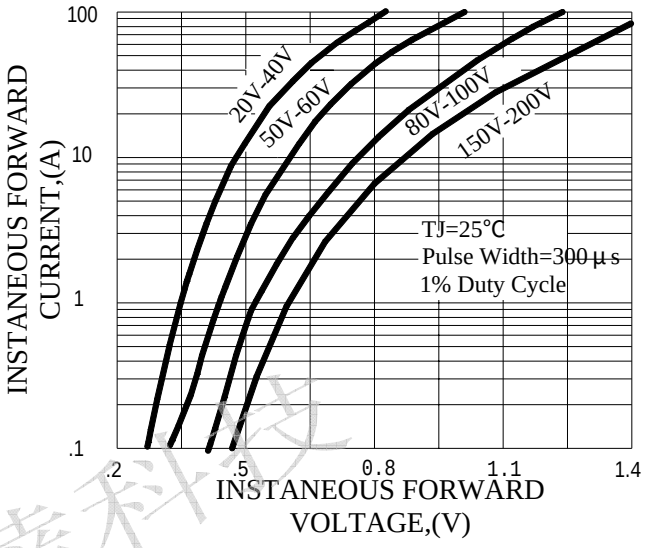


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

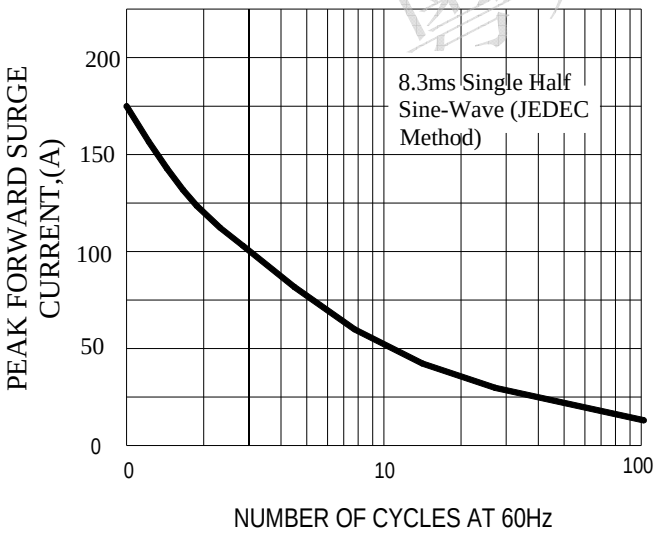


FIG.4-TYPICAL REVERSE CHARACTERISTICS