MBR2020FCT THRU MBR20200FCT

20.0AMP. SCHOTTKY BARRIER RECTIFIERS

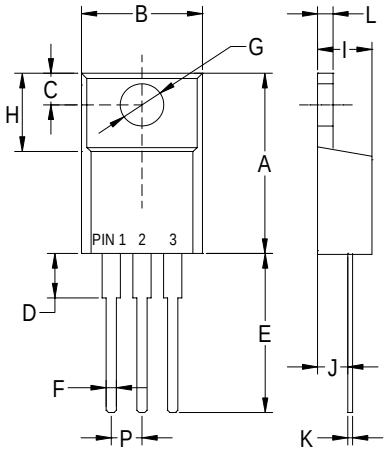
FEATURE

- .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

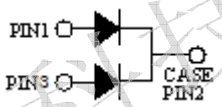
MECHANICAL DATA

- .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-220AB



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 2020 FCT	MBR 2030 FCT	MBR 2040 FCT	MBR 2050 FCT	MBR 2060 FCT	MBR 2080 FCT	MBR 20100 FCT	MBR 20150 FCT	MBR 20200 FCT	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 C	$I_{F(AV)}$	20.0									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°C	I_R	1.0					0.5				mA
at rated DC blocking voltage @Ta =100°C		50.0					40.0				mA
Typical Junction Capacitance (Note1)	C_J	600					250				pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	2.0									℃/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 (MBR2020FCT THRU MBR20200FCT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

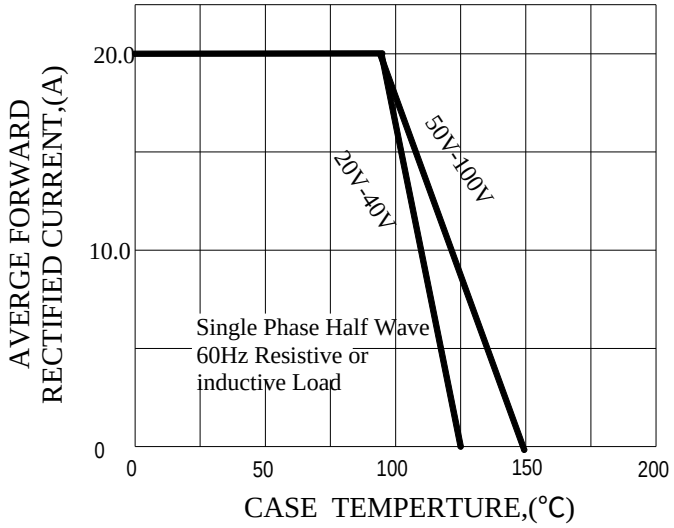


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

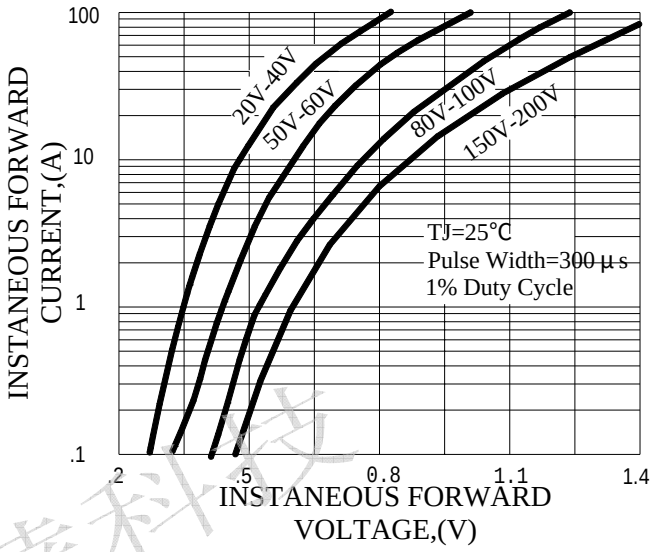


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

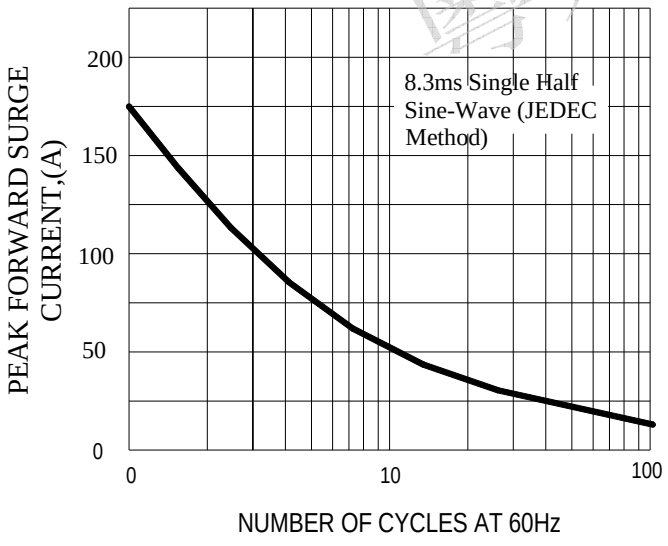


FIG.4-TYPICAL REVERSE CHARACTERISTICS