



PINGWEI ENTERPRISE

MBR2020FCT THRU MBR20200FCT

20.0AMPS. SCHOTTKY BARRIER RECTIFIERS

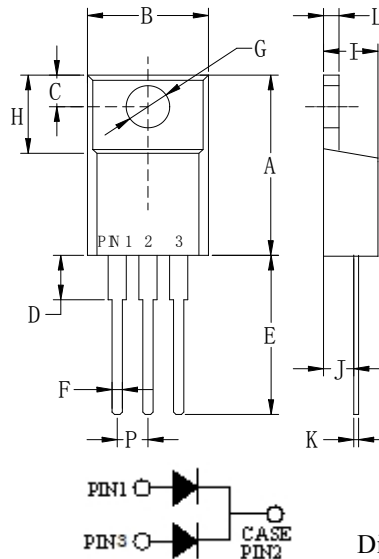
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10seconds, 0.25"(6.35mm)from case.

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	.571 (14.5)	.610 (15.5)
B	.383 (9.72)	.406 (10.3)
C	.110 (2.80)	.126 (3.2)
D	.133 (3.38)	.162 (4.1)
E	.512 (13.0)	.551 (14.0)
F	.028 (0.7)	.035 (0.90)
G	.114 (2.9)	.138 (3.5)
H	.268 (6.8)	.291 (7.4)
I	.162 (4.1)	.185 (4.7)
J	.102 (2.6)	.110 (2.8)
K	.018 (0.45)	.026 (0.65)
L	.097 (2.46)	.113 (2.86)
P	.89 (2.25)	.113 (2.85)

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYM BOL	MBR 2020 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	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	20.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175.0								A
Maximum Forward Voltage at 10.0A DC	V_F	0.45	0.55	0.70			0.85	0.95		V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	0.5			0.1			10.0		mA
Typical Junction Capacitance (Note 1)	C_J	700			300					pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	3.0								$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150								$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +125			-55 to +150					$^\circ\text{C}$

Note:

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

RATING AND CHARACTERISTIC CURVES (MBR2020FCT THRU MBR20200FCT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

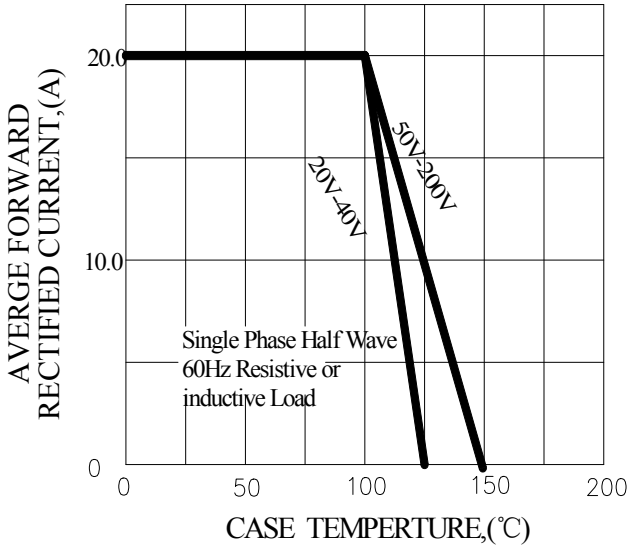


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

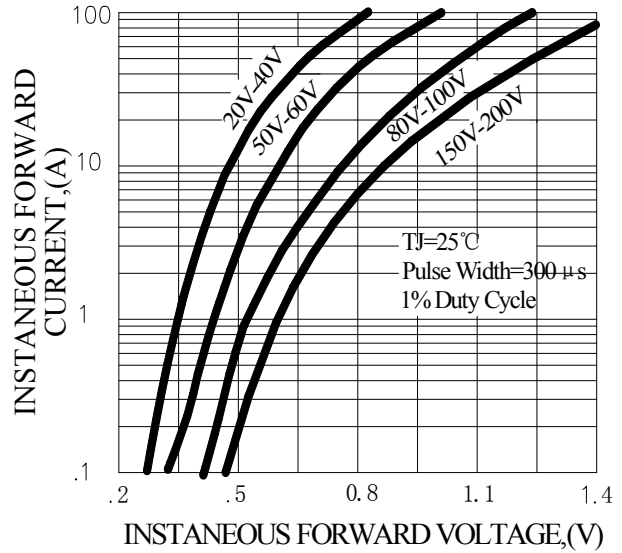


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

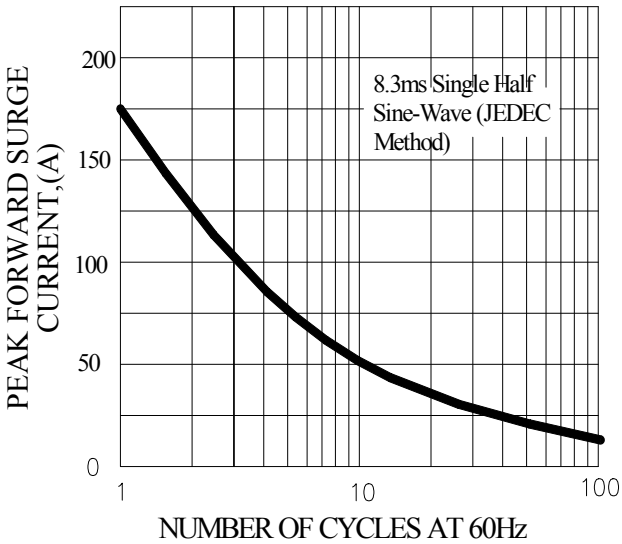


FIG.4-TYPICAL REVERSE CHARACTERISTICS

