RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

IMBR2045C THRU IMBR20200C

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 45 to 200 Volts CURRENT 20.0

FEATURES

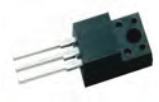
* Low switching noise
* Low forward voltage drop
* Low thermal resistance
* High current capability
* High switching capability
* High surge capabitity
* High reliability

MECHANICAL DATA

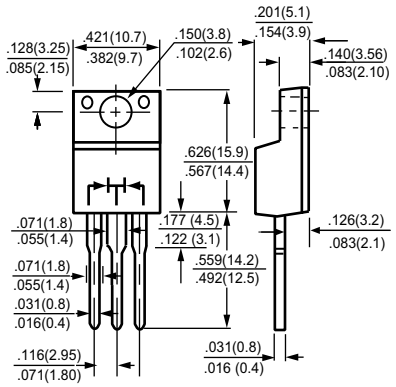
* Case: ITo-220 molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



ITO-220



Dimensions in inches and (millimeters).

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	IMBR2045C	IMBR2060C	IMBR20100C	IMBR20150C	IMBR20200C	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	45	60	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	32	42	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	45	60	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I_O	20					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	130					Amps
Typical Current Squared Time	I^2t	70					A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.0					°C/W
	$R_{\theta JA}$	40					
Operating Temperature Range	T_J	-55 to + 150					°C
Storage Temperature Range	T_{STG}	-55 to + 150					°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	IMBR20150C	IMBR20200C	IMBR20100C	IMBR20150C	IMBR20200C	UNITS
Maximum Instantaneous Forward Voltage at 10.0A DC		V_F	.65	.75	.85	.90	.95	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	0.2		0.1			mA
at Rated DC Blocking Voltage	@T_A = 150°C		100					mA

NOTES : 1. Thermal Resistance : Heat-sink mounted.
2. Suffix "A" = Common Anode.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
4. "ROHS compliant".

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RATING AND CHARACTERISTICS CURVES (IMBR2045C THRU IMBR20200C)

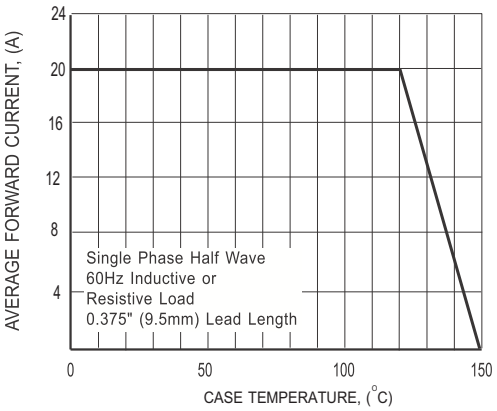


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

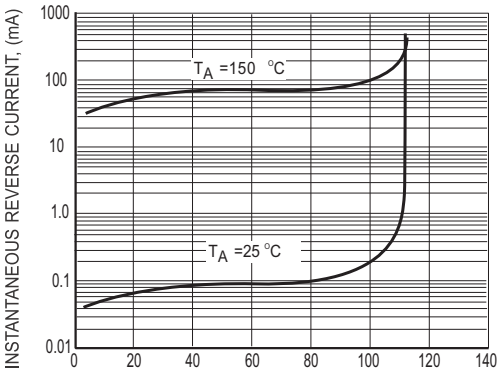


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

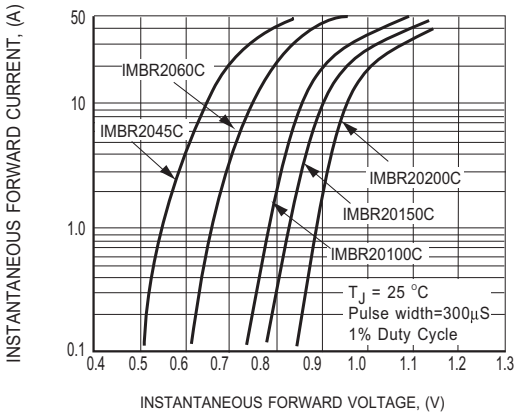


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

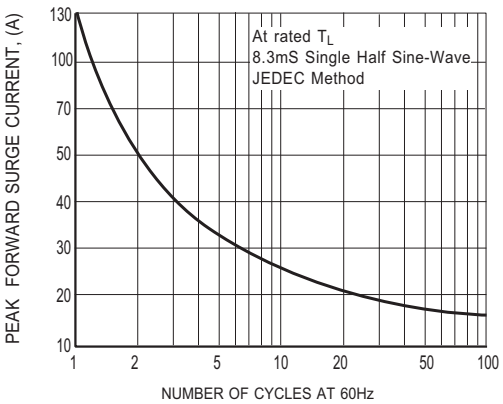


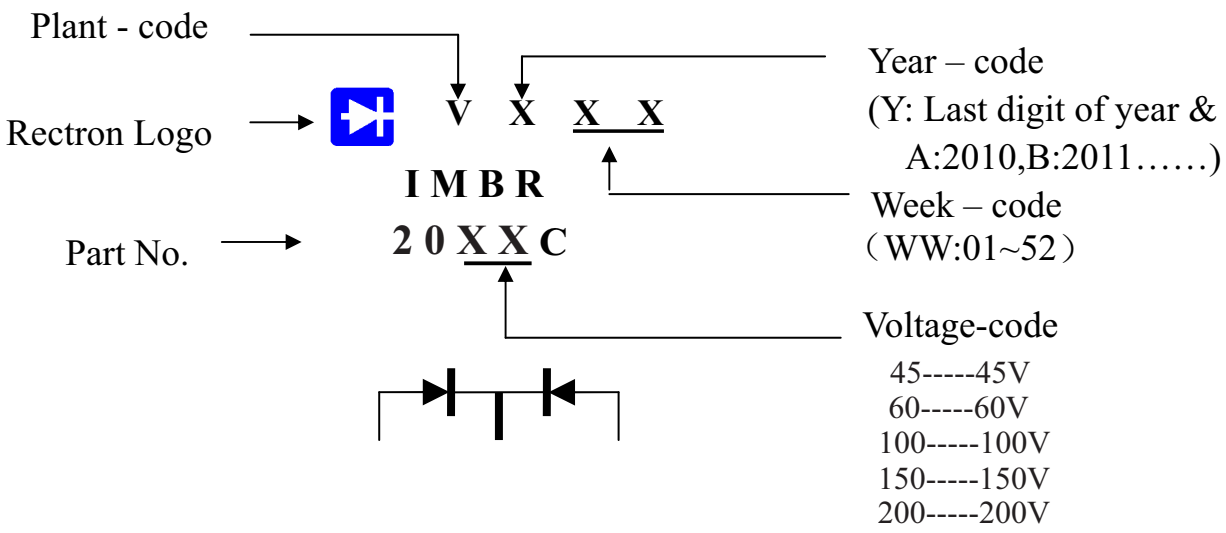
FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

RECTRON

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for –C)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

3.2 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
(I)TO-220/TO-220(A)	-C	2,000	550*140*92	572*308*120	4,000	11.80

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