



# MBR2020C thru MBR2060C



## Schottky Barrier Rectifiers



**TO-220AB**

### Primary Characteristics

$I_F$	20	A
$V_{RRM}$	20~60	V
$I_{FSM}$	150	A
$I_F=10 @ V_F$	0.7, 0.8	V
$T_J \text{ max}$	125	°C

### Features

- Guard Ring for Over Voltage Protection
- High Forward Surge Capability
- High Frequency Operation

### Mechanical Data

- Case : TO-220AB
- Case Material : Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals : Solder Plated, Solderable per MIL-STD-750, Method 2026

### Ordering Information

Part No.	Remark	Package	Packing
MBR20xxC	RoHS Compliant	TO-220AB	50 / Tube
MBR20xxC-H	Halogen Free		

### Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	MBR202 0C	MBR203 0C	MBR204 0C	MBR204 5C	MBR205 0C	MBR206 0C	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31.5	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	V
Maximum Average Forward Rectified Current (Total) (Per Leg)	$I_F$	20 10						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	150						A
Maximum Instantaneous Forward Voltage $I_F=10A @ 25^\circ C$	$V_F$	0.7				0.8		V
Maximum DC Reverse Current @ $T_J=25^\circ C$ at Rated DC Blocking Voltage @ $T_J=100^\circ C$	$I_R$	0.2 20						mA
Typical Thermal Resistance	$R_{\theta JC}$	3						°C/W
Operating Temperature Range	$T_J$	-55 to +125						°C
Storage Temperature Range	$T_{STG}$	-55 to +150						°C
Marking Code		MBR202 0C	MBR203 0C	MBR204 0C	MBR204 5C	MBR205 0C	MBR206 0C	



### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

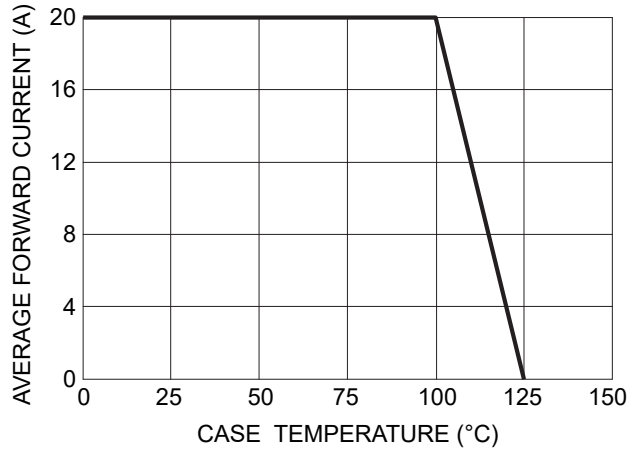


FIG. 2-Typical Forward Characteristics

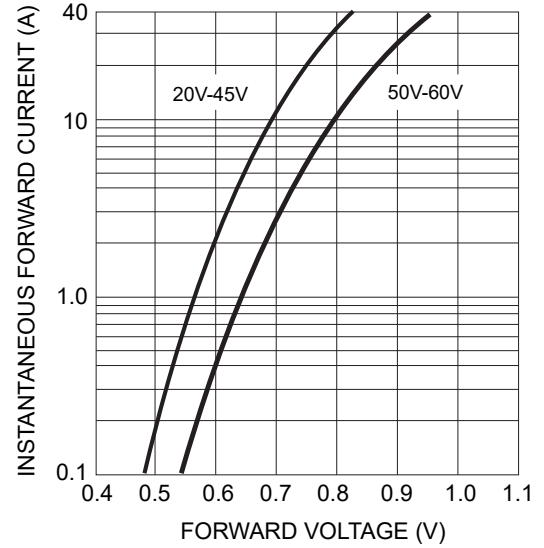


FIG. 3-Maximum Non-Repetitive Forward Surge Current

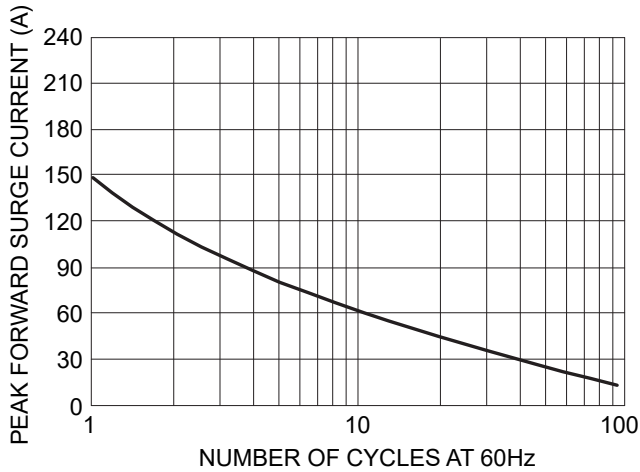
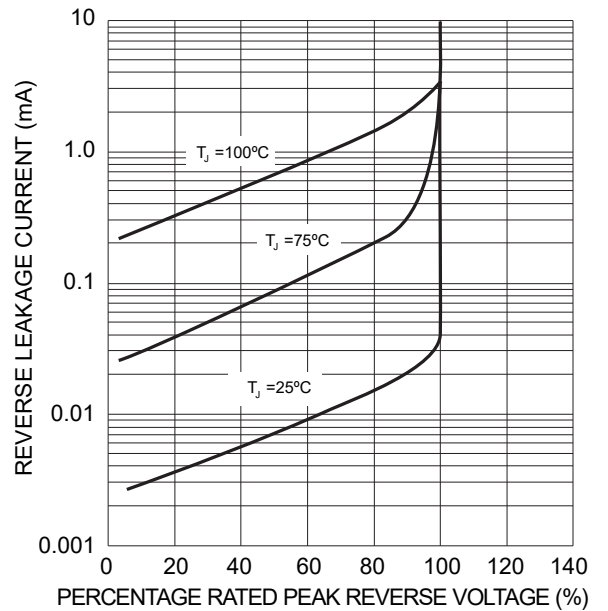
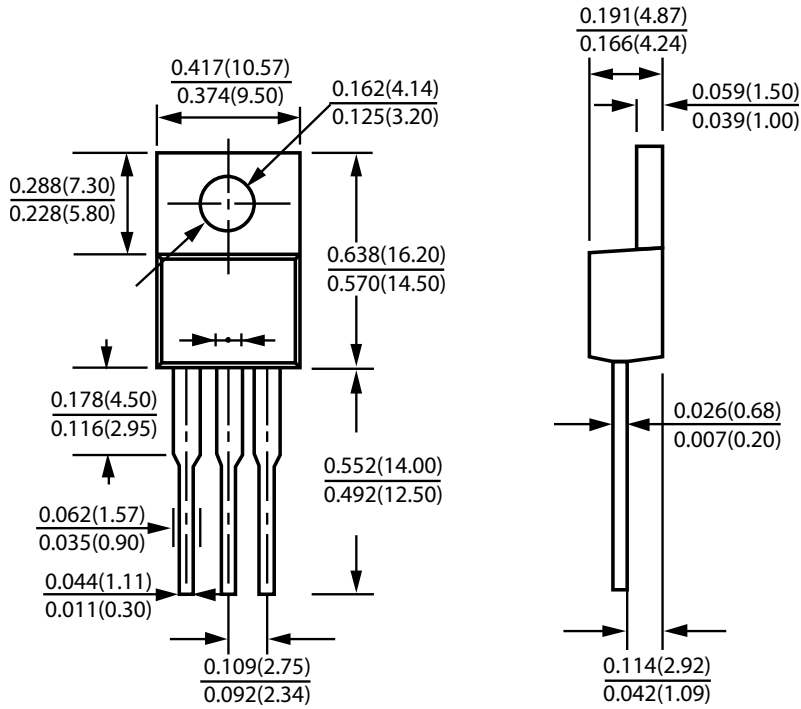


FIG. 4-Typical Reverse Characteristics





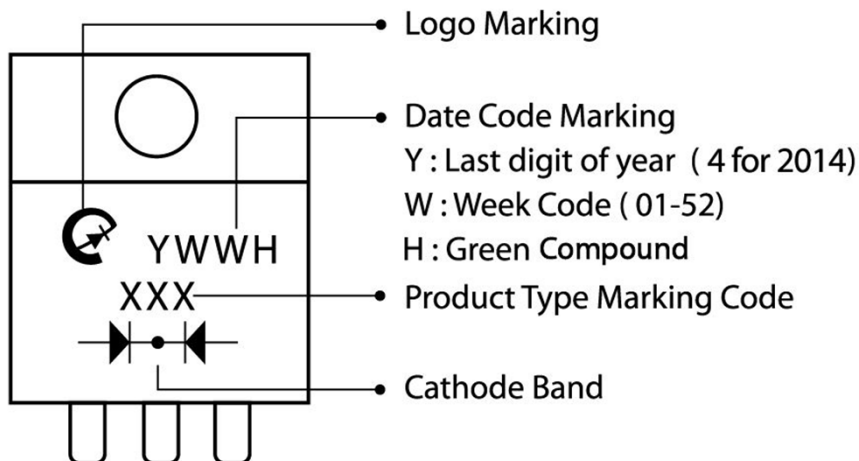
### Package Outline Dimensions



### TO-220AB

Dimensions in inches and (millimeters)

### Marking Information





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