



Micro Commercial Components

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## Features

- Guard Ring For Transient Protection
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking : type number
- Low Power Loss, High Efficiency

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Maximum Re current Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR3020PT	20V	14V	20V
MBR3030PT	30V	21V	30V
MBR3035PT	35V	24.5V	35V
MBR3040PT	40V	28V	40V
MBR3045PT	45V	31.5V	45V
MBR3060PT	60V	42V	60V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

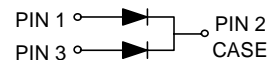
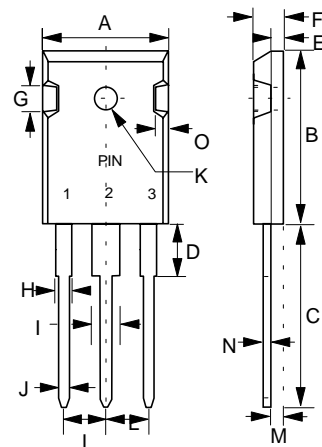
Average Forward Current	$I_{F(AV)}$	30.0A	$T_C=125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms half sine
Maximum Instantaneous Forward Voltage MBR3020PT-3045PT MBR3060PT MBR3020PT-3045PT MBR3060PT	$V_F$	.63V .75V .76V .80V	$I_{FM} = 20.0A$ $T_A=25^\circ\text{C}$ $I_{FM} = 30.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage MBR3020PT-3045PT MBR3060PT MBR3020PT-3045PT MBR3060PT	$I_R$	1mA 5mA 60mA 100mA	$T_C=25^\circ\text{C}$ $T_C=25^\circ\text{C}$ $T_C=125^\circ\text{C}$ $T_C=125^\circ\text{C}$
Typical Junction Capacitance	$C_j$	500pF	Measured at 1.0MHz, $V_R=4.0V$

Pulse test: Pulse width 300 usec, duty cycle 2%.

# MBR3020PT THRU MBR3060PT

## 30 Amp Schottky Barrier Rectifier 20 to 60 Volts

### TO-247



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.620	.640	15.75	16.25	
B	.837	.856	21.25	21.75	
C	.772	.791	19.60	20.10	
D	.149	.172	3.78	4.38	
E	.074	.082	1.88	2.08	
F	.192	.202	4.87	5.13	
G	.173 TYP		4.4 TYP		
H	.075	.085	1.90	2.16	
I	.115	.127	2.93	3.22	
J	.044	.048	1.12	1.22	
K	.114	.126	2.90	3.20	∅
L	.205	.224	5.20	5.70	
M	.083	.095	2.10	2.40	
N	.020	.030	0.51	0.76	
O	.076	.086	1.93	2.18	

FIG.1 - FORWARD CURRENT DERATING CURVE

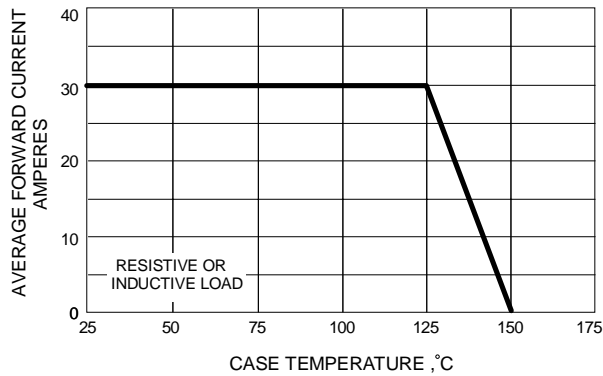


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

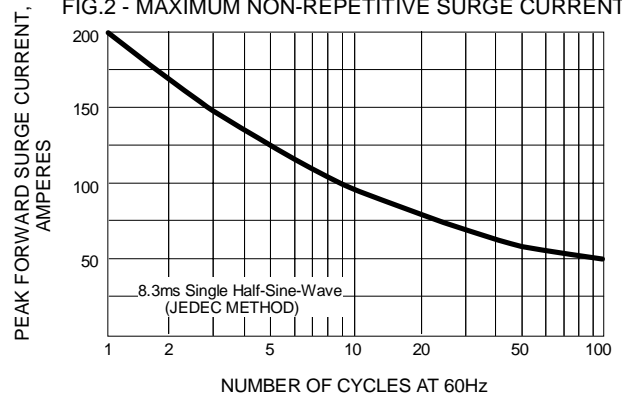


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

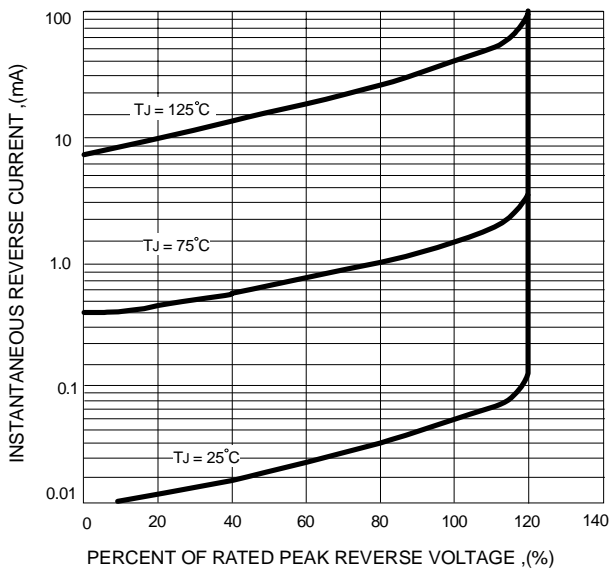


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

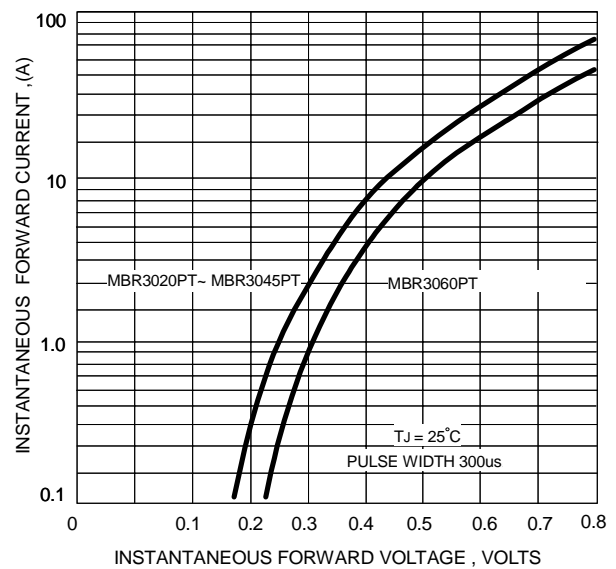
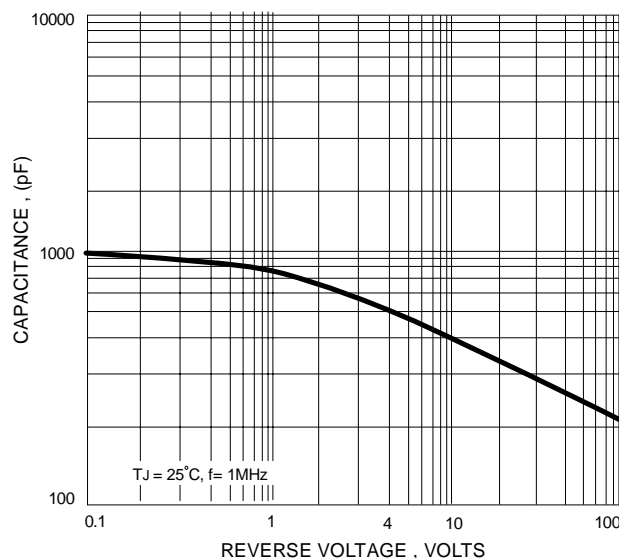


FIG.5 - TYPICAL JUNCTION CAPACITANCE





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