



Micro Commercial Components

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MBR3020PT THRU MBR3060PT

30 Amp Schottky Barrier Rectifier 20 to 60 Volts

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

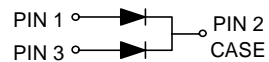
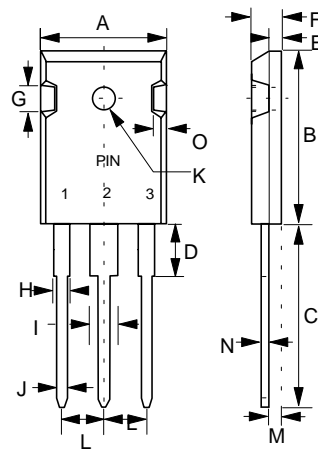
MCC Part Number	Maximum Re current Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR3020PT	20V	14V	20V
MBR3030PT	30V	21V	30V
MBR3035PT	35V	24.5V	35V
MBR3040PT	40V	28V	40V
MBR3045PT	45V	31.5V	45V
MBR3060PT	60V	42V	60V

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%.

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

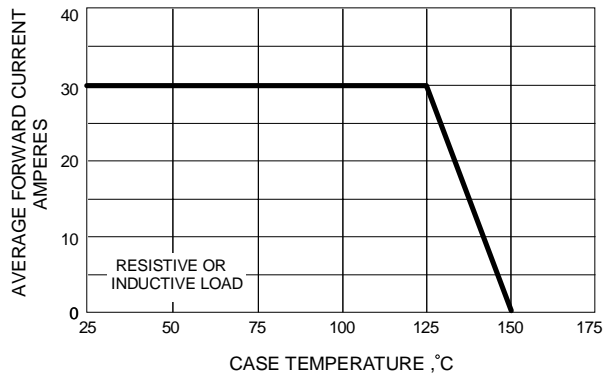


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

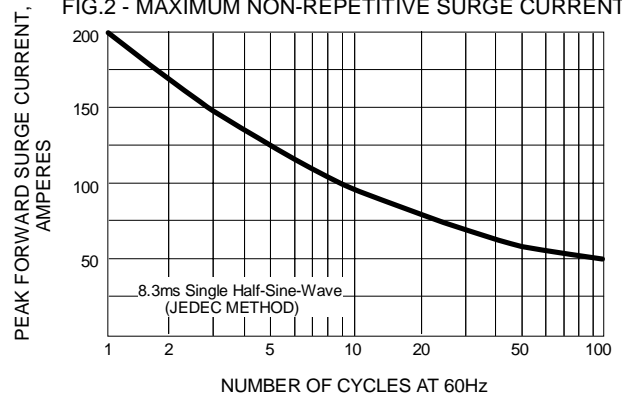


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

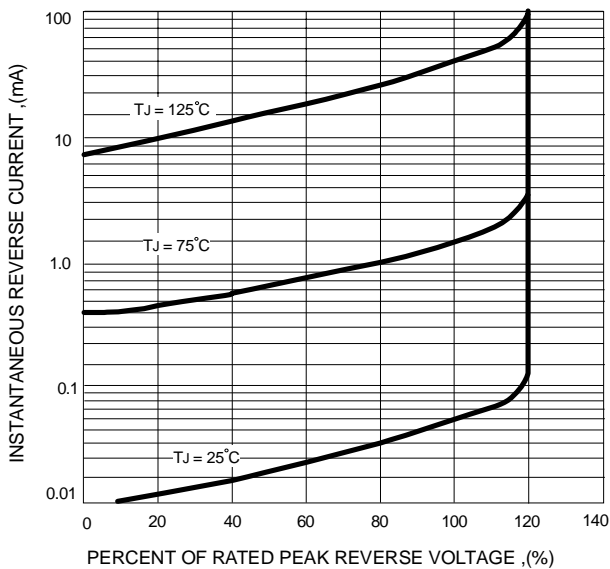


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

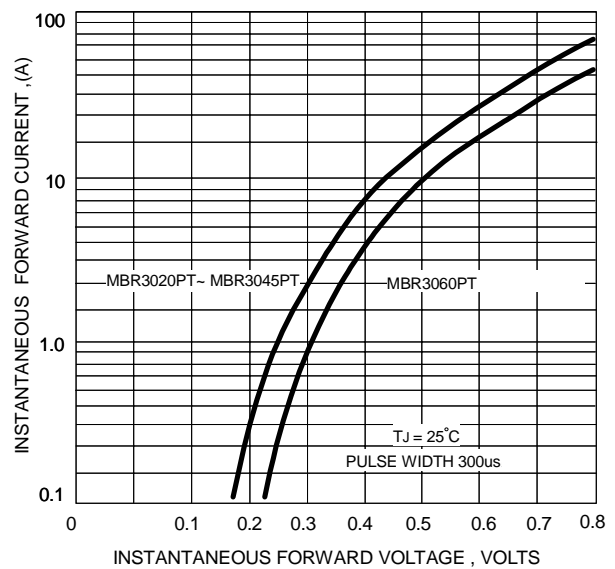
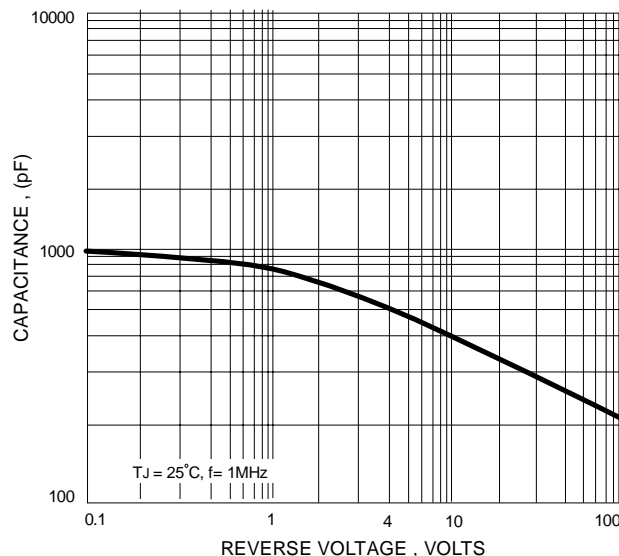


FIG.5 - TYPICAL JUNCTION CAPACITANCE





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