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Micro Commercial Components



Micro Commercial Components  
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## MBRB3030CT THRU MBRB3060CT

### Features

- Halogen free available upon request by adding suffix "-HF"
- Guard ring for transient protection
- Low Power Loss , High Efficiency
- High Current Capability
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Marking : type number

### Maximum Ratings

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB3030CT	30V	21V	30V
MBRB3040CT	40V	28V	40V
MBRB3045CT	45V	31.5V	45V
MBRB3060CT	60V	42V	60V

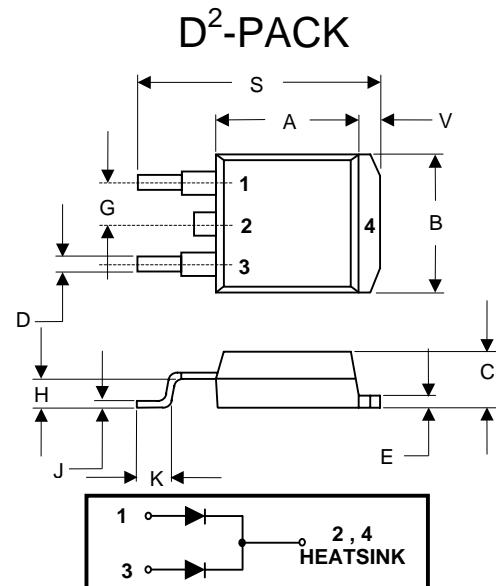
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
MBRB3030CT-3045CT	$V_F$	0.55V	$I_{FM} = 15\text{A}; T_C = 25^\circ\text{C}$
MBRB3060CT		0.72V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 75mA	$T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	420pF	Measured at 1.0MHz, $V_R=4\text{V}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 2%

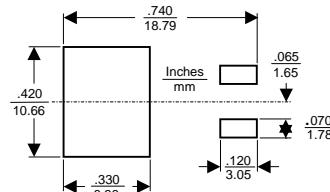
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

### 30 Amp Schottky Barrier Rectifier 30 to 60 Volts



DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.320	.359	8.13	9.14
B	.380	.411	9.65	10.45
C	.160	.190	4.06	4.83
D	.020	.035	0.51	0.89
E	.045	.055	1.14	1.40
G	.095	.105	2.41	2.67
H	.096	.120	2.43	3.03
J	.014	.021	0.35	0.53
K	.090	.110	2.29	2.79
S	.575	.625	14.60	15.80
V	.045	.055	1.14	1.40

### SUGGESTED SOLDER PAD LAYOUT



## MBRB3030CT thru MBRB3060CT

Figure 1  
Typical Forward Characteristics

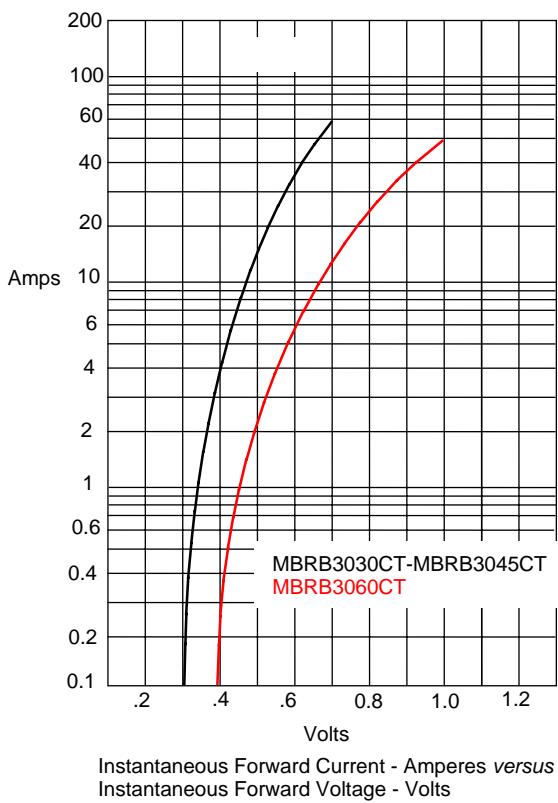


Figure 2  
**Micro Commercial Components**  
Typical Reverse Characteristics

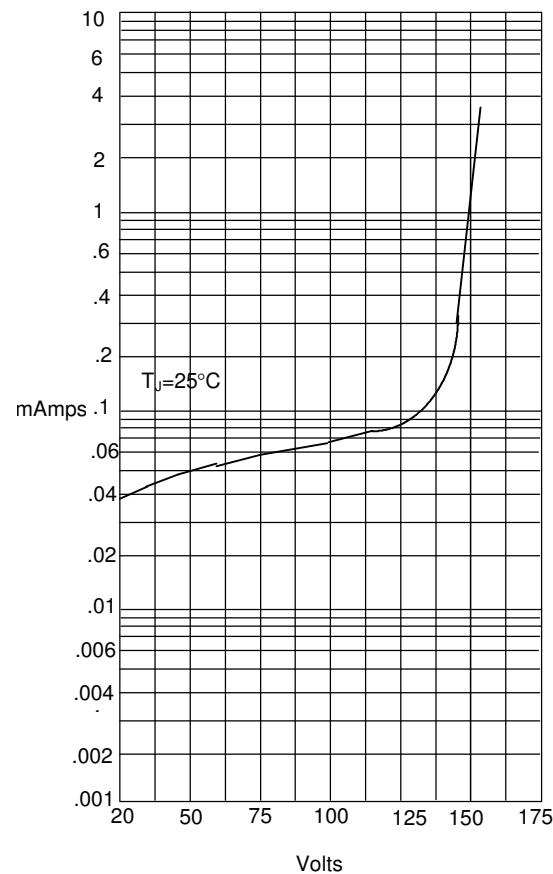
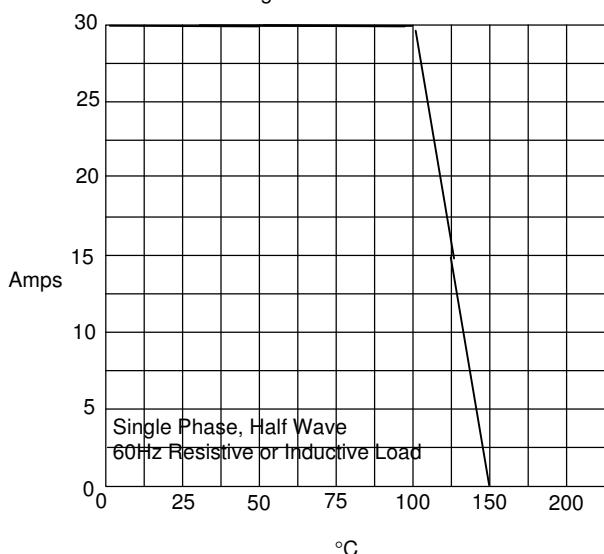
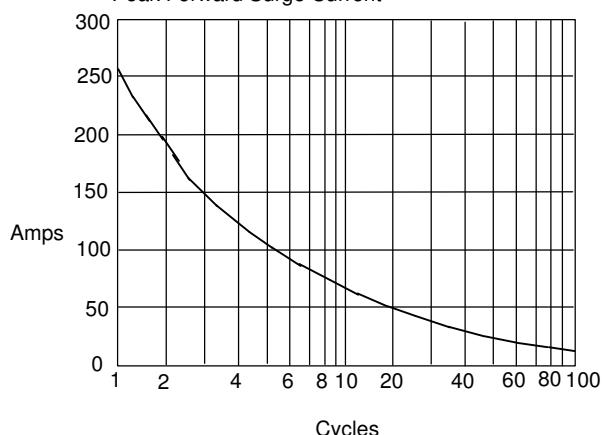


Figure 3  
Forward Derating Curve



Single Phase, Half Wave  
60Hz Resistive or Inductive Load

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Ampères versus Number Of Cycles At 60Hz - Cycles

## Ordering Information :

Device	Packing
Part Number-BP	Tube : 1 Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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