



Micro Commercial Components



Micro Commercial Components  
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## Features

- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Meat of Silicon Rectifier, Majority Conduction
- Halogen free available upon request by adding suffix "-HF"
- Guard ring for transient protection
- Low Forward Voltage Drop and Low Power Loss
- High Current Capability, High Efficiency

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB1030CT	30V	21V	30V
MBRB1035CT	35V	24.5V	35V
MBRB1040CT	40V	28V	40V
MBRB1045CT	45V	31.5V	45V
MBRB1050CT	50V	35V	50V
MBRB1060CT	60V	42V	60V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 95^\circ C$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.55V	$I_{FM} = 5A$ ; $T_J = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA	$T_J = 25^\circ C$
Typical Junction Capacitance	$C_J$	200pF	Measured at 1.0MHz, $V_R=4.0V$

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

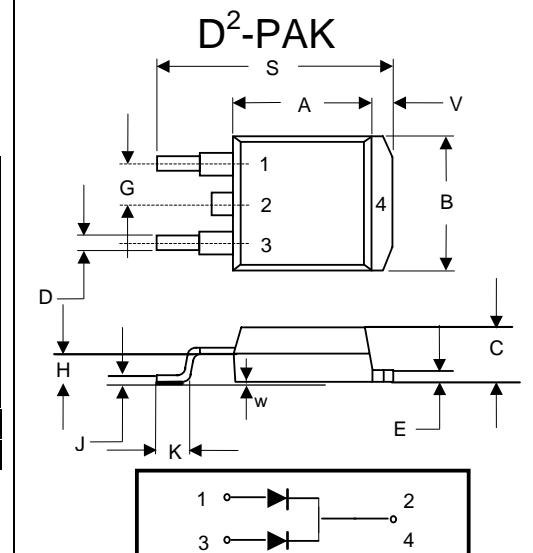
\*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

**MBRB1030CT**

**THRU**

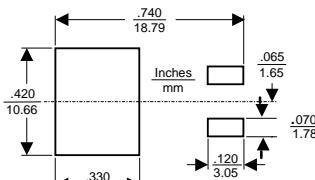
**MBRB1060CT**

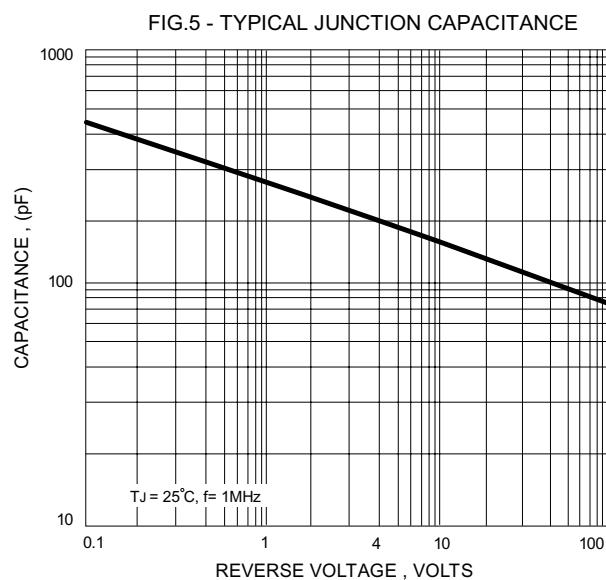
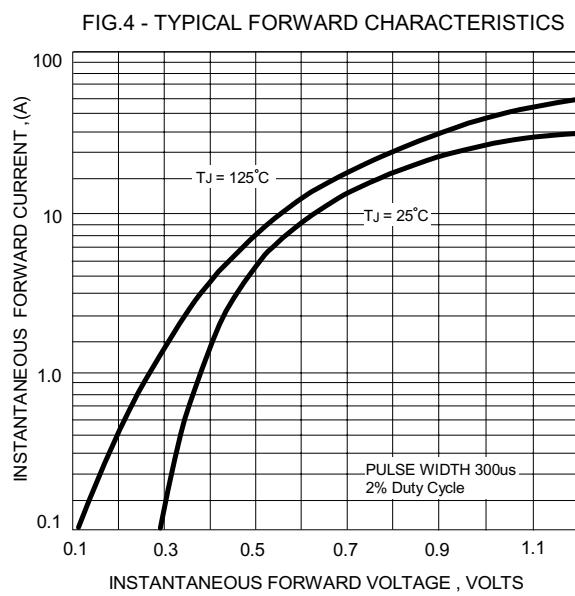
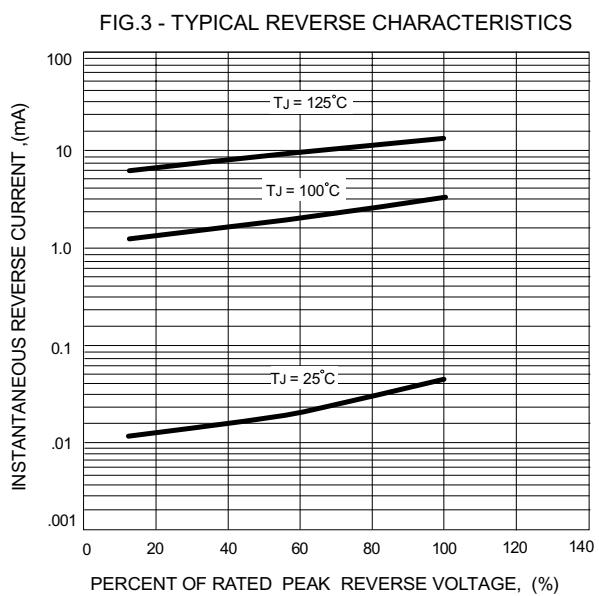
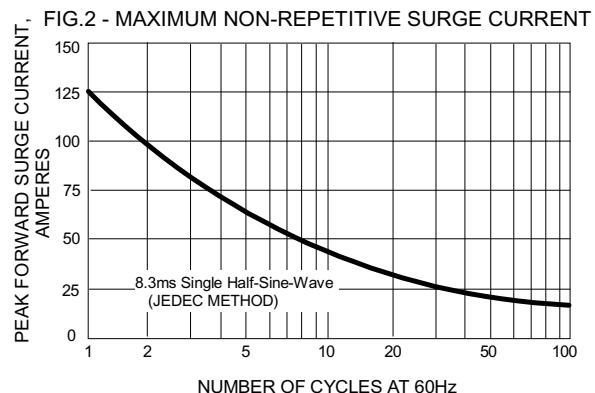
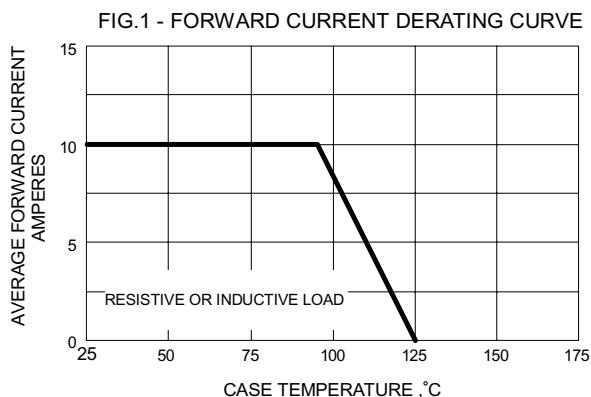
**10 Amp  
Schottky  
Barrier Rectifier  
30 to 60 Volts**



DIM	DIMENSIONS				NOTE
	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	
W	0	.006	0	.015	

### SUGGESTED SOLDER PAD LAYOUT



RATING AND CHARACTERISTIC CURVES  
 MBRB1030CT thru MBRB1060CT




Micro Commercial Components

## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 800pcs/Reel
Part Number-BP	Tube: 5Kpcs/Ctn

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

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