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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MBRB1030CT **THRU** MBRB1060CT

## **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

- Meatl of Silicon Rectifier, Majority Conducton 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

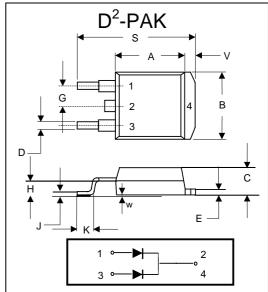
MCC Catalog Number	Maximum Reccurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB1030CT	30V	21V	30V
MBRB1035CT	35V	24.5V	35V
MBRB1040CT	40V	28V	40V
MBRB1045CT	45V	31.5V	45V
MBRB1050CT	50V	35V	50V
MBRB1060CT	60V	42V	60V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

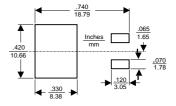
Average Forward Current	$I_{F(AV)}$	10 A	T <sub>C</sub> = 95°C
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_{F}$	.55V	I <sub>FM</sub> = 5A; T <sub>J</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.5mA	T <sub>J</sub> = 25°C
Typical Junction Capacitance	С	200pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

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



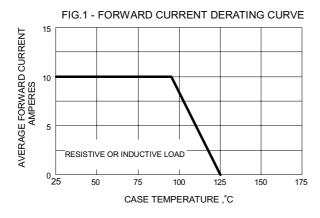
DIM	INCH	IES	NSIONS MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	MAX
Α	.320	.359	8.13	9.14	
В	.380	.411	9.65	10.45	
С	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
Е	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
Н	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	
W	0	.006	0	0.15	
SUGGESTED SOLDER PAD LAYOUT					



<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%



# RATING AND CHARACTERISTIC CURVES MBRB1030CT thru MBRB1060CT



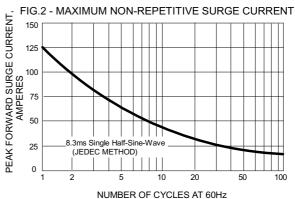


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

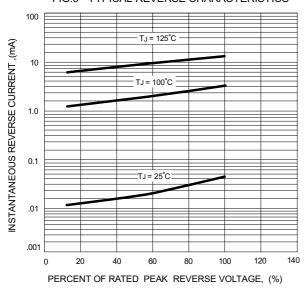


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

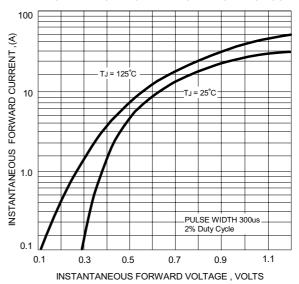
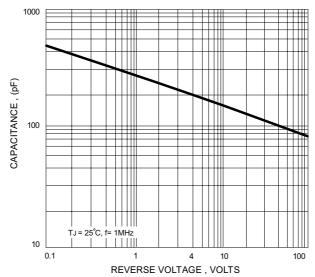


FIG.5 - TYPICAL JUNCTION CAPACITANCE





### **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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