



Micro Commercial Components

Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# MBR870 Thru MBR8100

## Features

- High Current Capability, Low VF
- Low Power Loss, High Efficiency
- Guard Ring for Transient Protection
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C
- Maximum Thermal Resistance:  $R_{\theta JC} = 2.0^{\circ}\text{C}/\text{W}$  junction to case

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR870	70V	49V	70V
MBR880	80V	56V	80V
MBR890	90V	63V	90V
MBR8100	100V	70V	100V

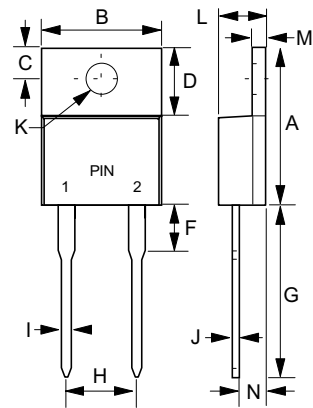
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8A	$T_C = 110^{\circ}\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, half sine
Voltage Rate of Change	$dv/dt$	10000	Rated $V_R$
Maximum Instantaneous Forward Voltage	$V_F$	.85V .75V .95V .85V	$I_{FM} = 8A @ T_J = 25^{\circ}\text{C}$ $I_{FM} = 8A @ T_J = 125^{\circ}\text{C}$ $I_{FM} = 16A @ T_J = 25^{\circ}\text{C}$ $I_{FM} = 16A @ T_J = 125^{\circ}\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.15mA 100mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Typical Junction Capacitance	$C_J$	280pF	Measured at 1.0MHz, $V_R=4.0V$

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

# 8 Amp Schottky Rectifier 70-100 Volts

## TO-220AC



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.190	.210	4.83	5.33	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

# MBR870 THRU MBR8100

FIG.1 - FORWARD CURRENT DERATING CURVE

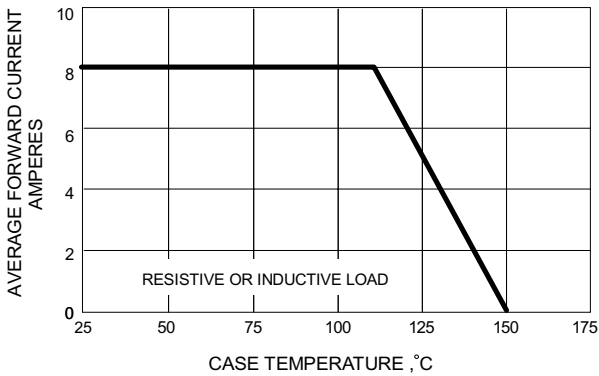


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

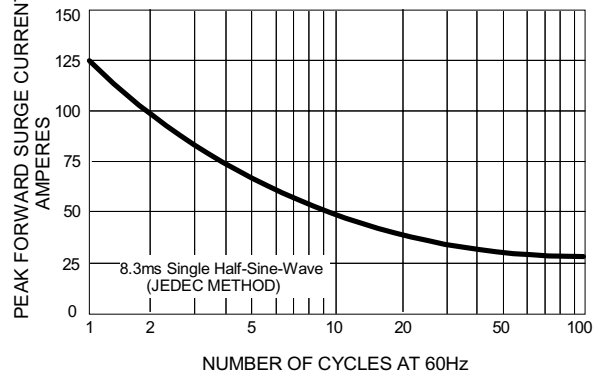


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

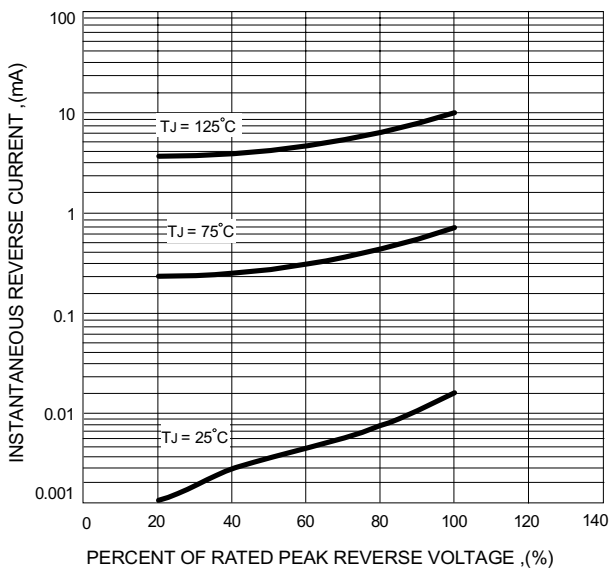


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

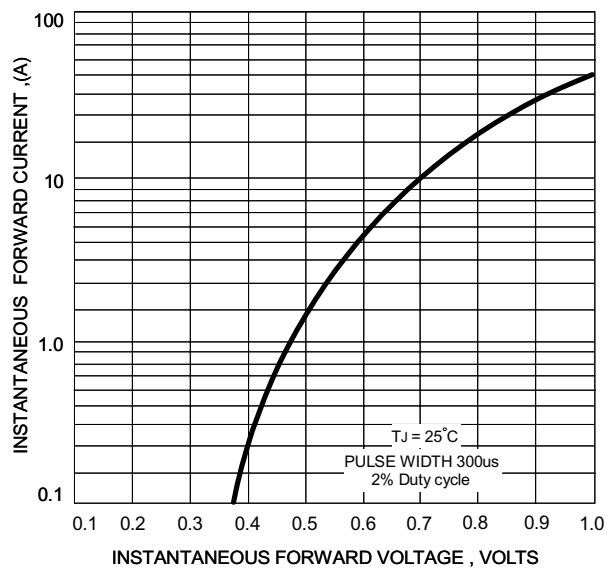
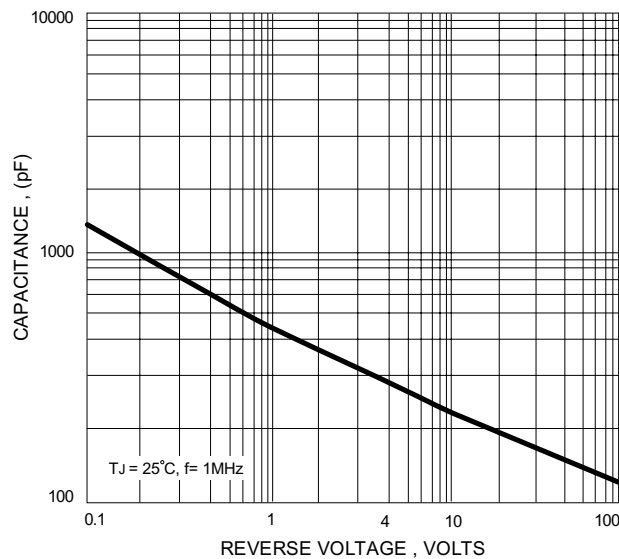


FIG.5 - TYPICAL JUNCTION CAPACITANCE





Micro Commercial Components

## Ordering Information

Device (Part Number)-BP	Packing Bulk;1Kpcs/Box
----------------------------	---------------------------

**\*\*\*IMPORTANT NOTICE\*\*\***

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.