



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

- Halogen free available upon request by adding suffix "-HF"
- 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

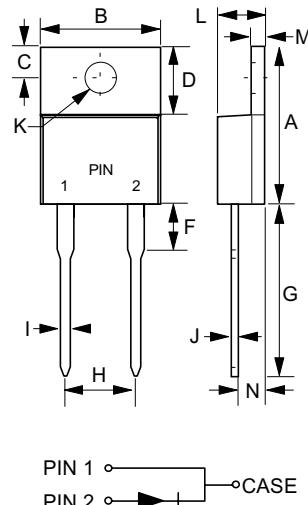
Electrical Characteristics @ 25°C Unless Otherwise Specified

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, $V_R=4.0\text{V}$

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	

www.mccsemi.com

MBR870 THRU MBR8100

FIG.1 - FORWARD CURRENT DERATING CURVE

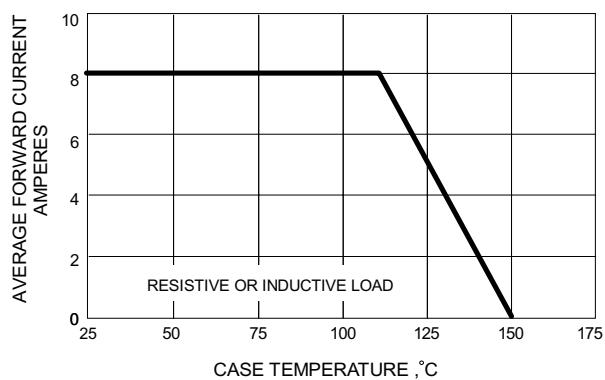


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

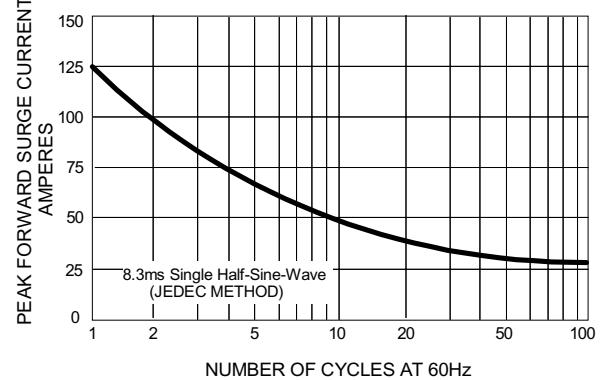


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

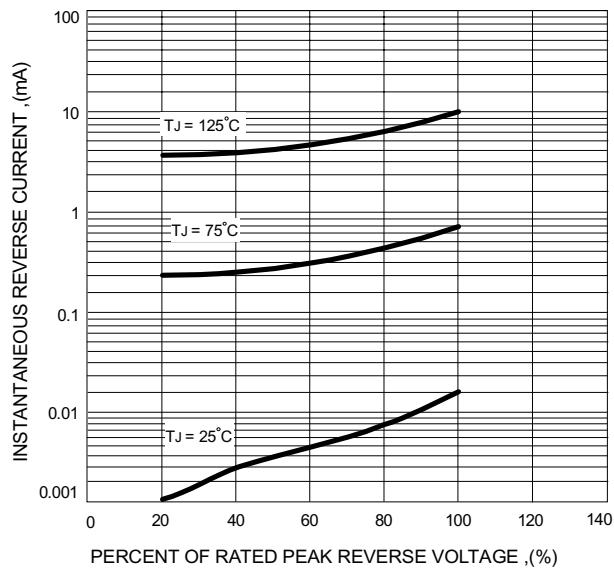


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

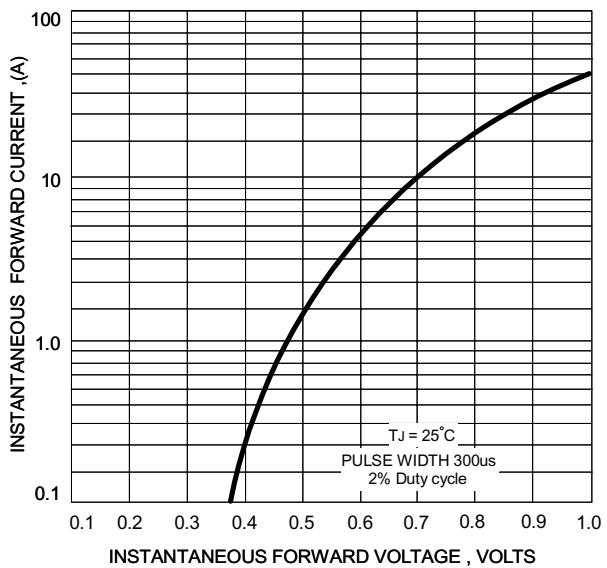
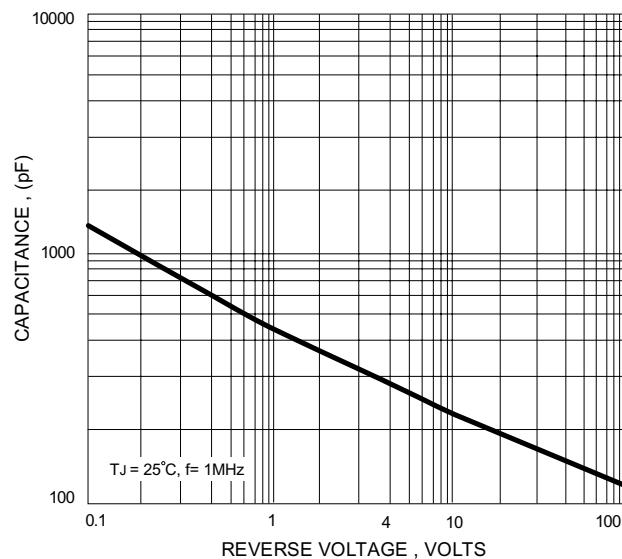


FIG.5 - TYPICAL JUNCTION CAPACITANCE



Ordering Information

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

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

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.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.