

	<b>E502650</b>
---	----------------

**Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Surge Overload Rating

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2.2°C/W Junction To Case (Note 2)

**Mechanical Data**

- Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU10A	GBU10A	50V	35V	50V
GBU10B	GBU10B	100V	70V	100V
GBU10D	GBU10D	200V	140V	200V
GBU10G	GBU10G	400V	280V	400V
GBU10J	GBU10J	600V	420V	600V
GBU10K	GBU10K	800V	560V	800V
GBU10M	GBU10M	1000V	700V	1000V

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

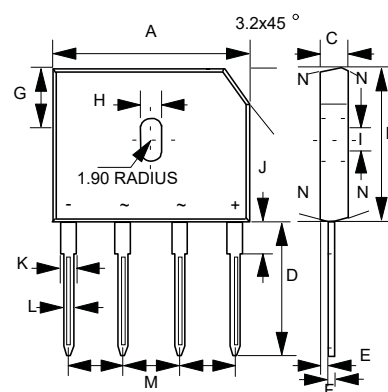
Maximum Average Forward Current	$I_{F(AV)}$	10A	$T_C = 100^\circ C$
Peak Forward Surge Current	$I_{FSM}$	240A 220A 480A 440A	$T_J = 25^\circ C$ 8.3ms, Half Sine $T_J = 125^\circ C$ $T_J = 25^\circ C$ 1.0ms, Half Sine $T_J = 125^\circ C$
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 1.2V	$I_{FM} = 5A$ ; $I_{FM} = 10A$ ;
Rating for fusing	$I^2t$	239A <sup>2</sup> s 115.2A <sup>2</sup> s	$t < 8.3ms$ $t < 1.0ms$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5µA 500µA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Typical Junction Capacitance	$C_J$	70pF	Measured at 1.0MHz, $V_R = 4.0V$

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

2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

# 10 Amp Single Phase Glass Passivated Bridge Rectifiers 50 to 1000 Volts

## GBU



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.860	0.880	21.80	22.30	
B	0.720	0.740	18.30	18.80	
C	0.130	0.142	3.30	3.60	
D	0.690	0.717	17.50	18.20	
E	0.030	0.039	0.76	1.00	
F	0.018	0.024	0.46	0.60	
G	0.290	0.310	7.40	7.90	
H	0.140	0.160	3.50	4.10	
I	0.065	0.085	1.65	2.16	
J	0.060	0.096	1.52	2.45	
K	0.077	0.098	1.95	2.50	
L	0.040	0.050	1.02	1.27	
M	0.190	0.210	4.83	5.33	
N	7.0° TYPICAL				

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

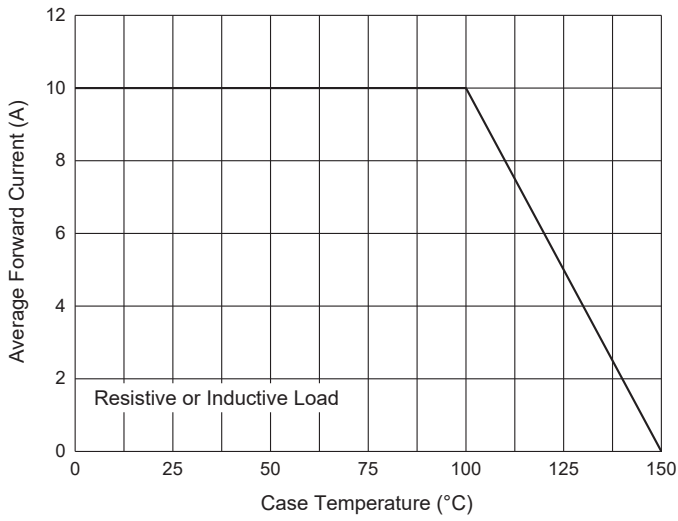


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

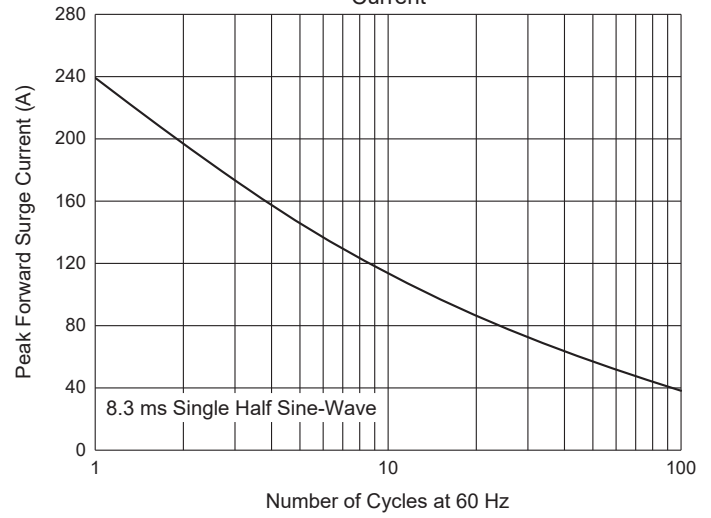


Fig. 3 - Typical Instantaneous Forward Characteristics

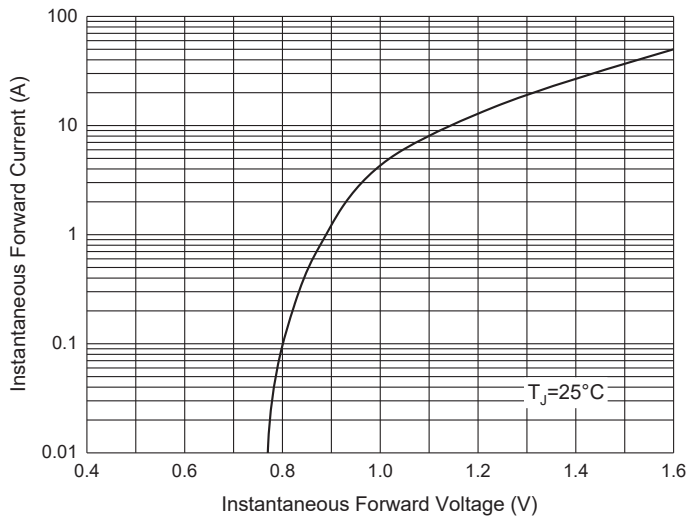
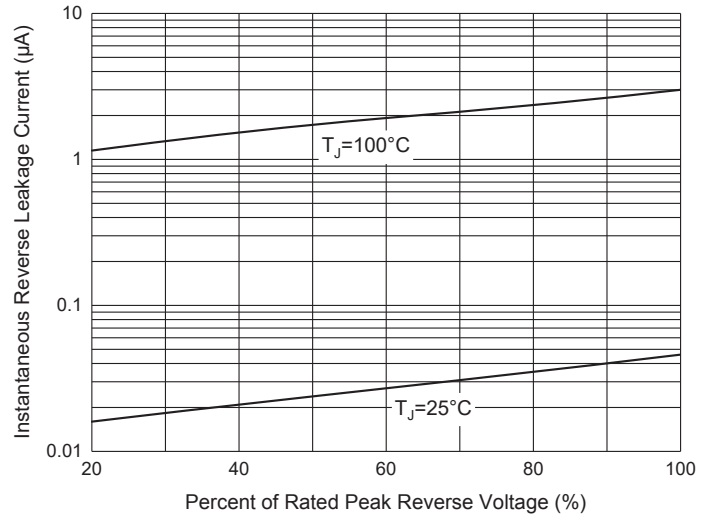


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:20pcs/Tube,1Kpcs/Box,2Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-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. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

**\*\*\*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.