



MASTER INSTRUMENT CORPORATION

GBU8A THRU GBU8M

Features

- Plastic Package has Underwriters Laboratory
- Glass Passivated Chip Junction
- High Temperature Soldering Guaranteed
- High Surge Overload Rating

**8 Amp Single Phase
Glass Passivated
Bridge Rectifier
50 to 1000 Volts**

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 2.2°C/W Junction to Case

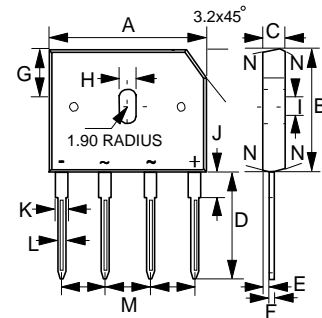
Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU8A	GBU8A	50V	35V	50V
GBU8B	GBU8B	100V	70V	100V
GBU8D	GBU8D	200V	140V	200V
GBU8G	GBU8G	400V	280V	400V
GBU8J	GBU8J	600V	420V	600V
GBU8K	GBU8K	800V	560V	800V
GBU8M	GBU8M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8 A	$T_c = 100^\circ C$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM}=4A$ $T_J = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 500uA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
I^2t Rating for fusing	I^2t	166A ² S	(t<8.3ms)
Typical Junction Capacitance	C_J	60pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse Test: Pulse Width 300 μ sec, Duty Cycle 1%

GBU



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.860	.880	21.80	22.30	
B	.720	.740	18.30	18.80	
C	.130	.140	3.30	3.56	
D	.690	.710	17.50	18.00	
E	.030	.039	0.76	1.00	
F	.018	.022	0.46	0.56	
G	.290	.310	7.40	7.90	
H	.140	.160	3.50	4.10	
I	.065	.085	1.65	2.16	
J	.089	.108	2.25	2.75	
K	.077	.093	1.95	2.35	
L	.040	.050	1.02	1.27	
M	.190	.210	4.83	5.33	
N	7.0° TYPICAL				



GBU8A thru GBU8M

FIG.1 - FORWARD CURRENT DERATING CURVE

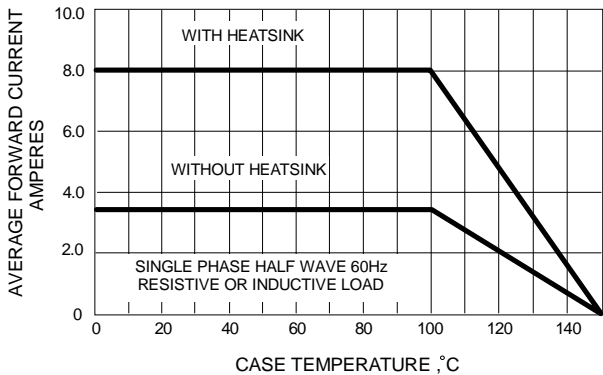


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

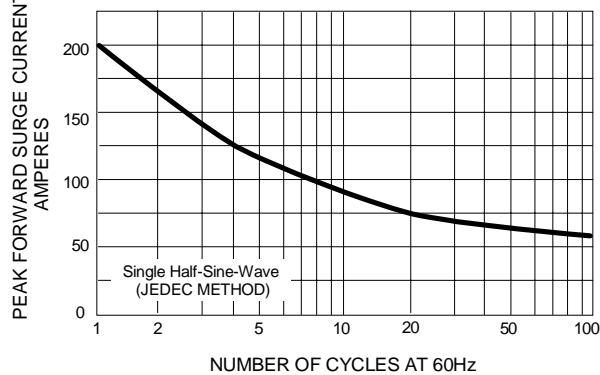


FIG.3 - TYPICAL JUNCTION CAPACITANCE

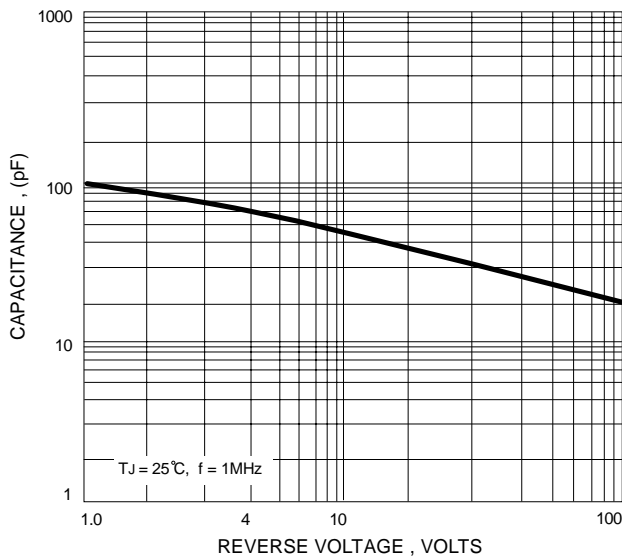


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

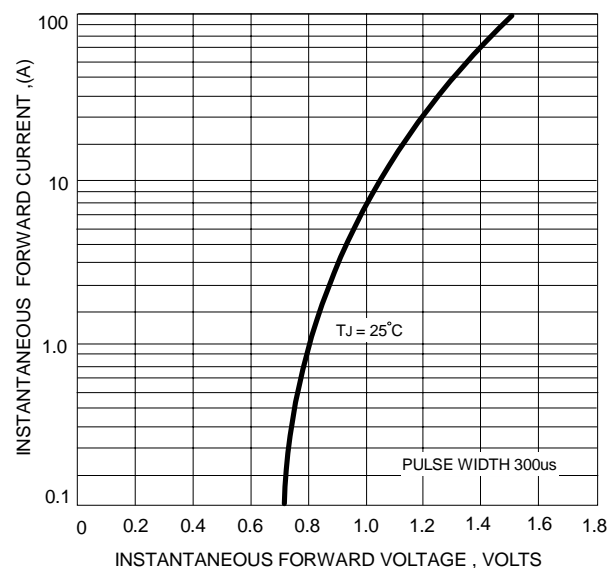


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

