	E502650

25 Amp Single Phase Glass Passivated Bridge Rectifiers 50 to 1000 Volts

Features

- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Max Thermal Resistance: 1.0°C/W Junction to Case (Heatsink)
- Max Thermal Resistance: 6.0°C/W Junction to Ambient (Heatsink)
- Max Thermal Resistance: 3.0°C/W Junction to Lead (Heatsink)
- Mounting Torque: 5in-lbs Maximum

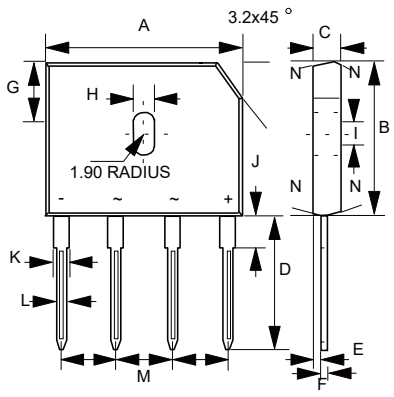
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU25005	GBU25005	50V	35V	50V
GBU2501	GBU2501	100V	70V	100V
GBU2502	GBU2502	200V	140V	200V
GBU2504	GBU2504	400V	280V	400V
GBU2506	GBU2506	600V	420V	600V
GBU2508	GBU2508	800V	560V	800V
GBU2510	GBU2510	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

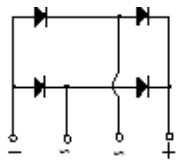
Maximum Average Forward Current (With Heatsink)	$I_{F(AV)}$	25A	T_C= 98°C
Peak Forward Surge Current	I_{FSM}	300A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM}=12.5A T_A = 25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10μA	T_A = 25°C
Rating for Fusing	I^2t	$373A^2s$	t<8.3ms
Dielectric Strength	V_{dis}	2.5KV	Terminals to Case, AC 1 Minute

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

GBU



DIM	INCHES		MM		NOTE
	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				



Case Style

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

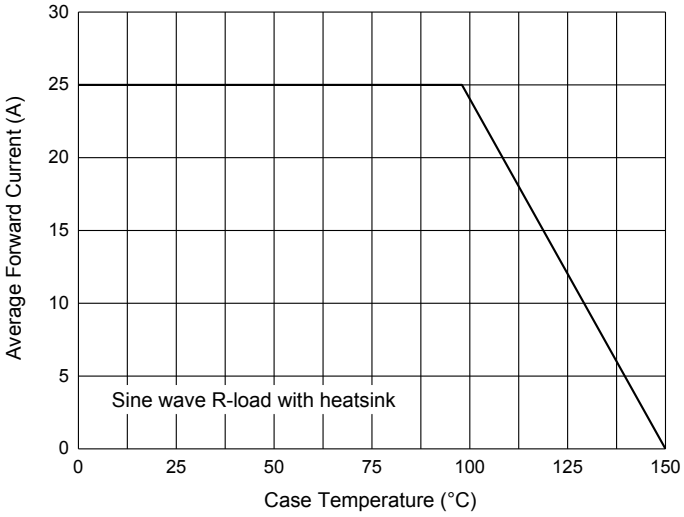


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

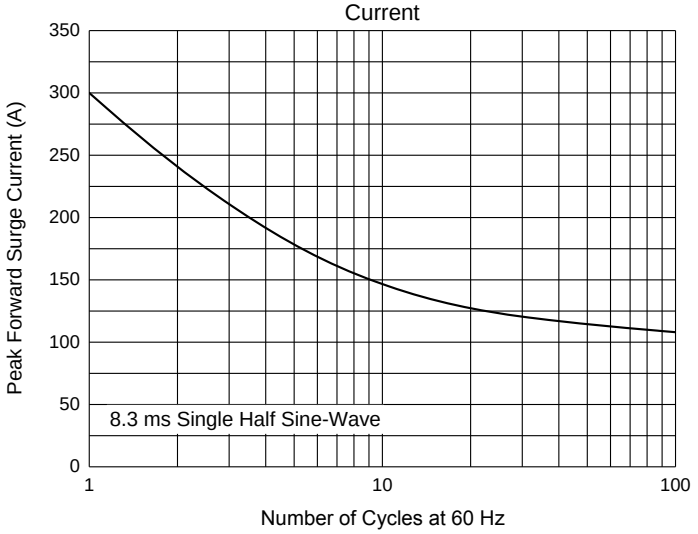


Fig. 3 - Typical Instantaneous Forward Characteristics

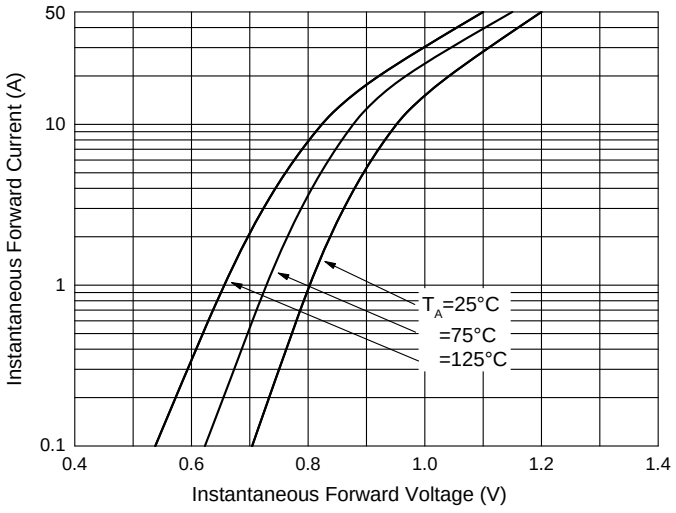


Fig. 4 - Typical Reverse Leakage Characteristics