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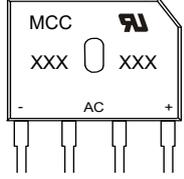
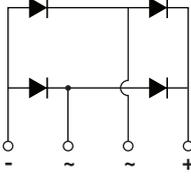
Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value							Unit
		GBU 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current	$I_{F(AV)}$	25 ($T_C=98^\circ\text{C}$, With Heatsink) 3.5 ($T_A=25^\circ\text{C}$, Without Heatsink)							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	300							A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		600							
I^2t Rating for Fusing @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	373							A^2s
Dielectric strength @ Terminals to Case, AC 1 Minute	V_{dis}	2.5							KV

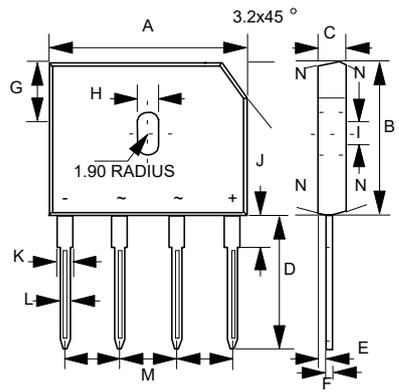
Part Number	Marking Code
GBU25005	GBU25005
GBU2501	GBU2501
GBU2502	GBU2502
GBU2504	GBU2504
GBU2506	GBU2506
GBU2508	GBU2508
GBU2510	GBU2510

Marking Diagram	Internal Structure
 <p>Marking Code: XXXXXX</p>	

- Note:
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 2. High temperature solder exemption applied, see EU directive annex 7a.

25 Amp Bridge Rectifier 50 to 1000 Volts

GBU



DIMENSIONS					NOTE
DIM	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				

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	Thermal Resistance from Junction to Case	Note 1		1		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient	Without Heatsink		25		°C/W

Note:

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

Mechanical Data

Recommended Mounting Torque: 5in·lbs

Electrical Characteristics @ 25°C Unless Otherwise Specified(Per Diode)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=12.5A; T_J=25^\circ C$			1.0	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			5 200	uA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		95		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

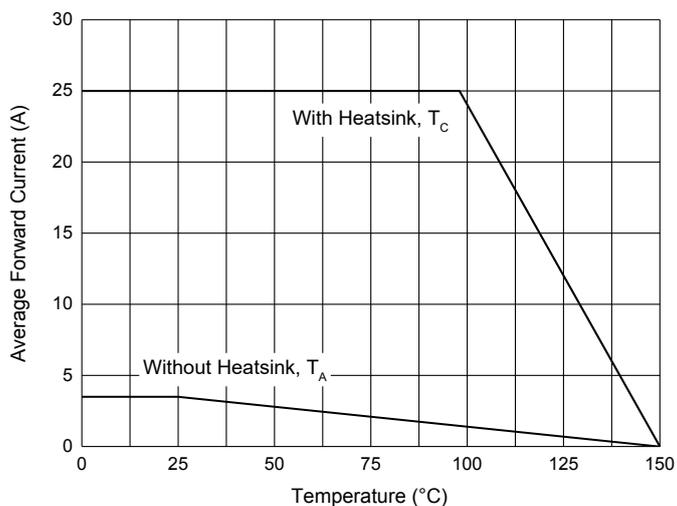


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

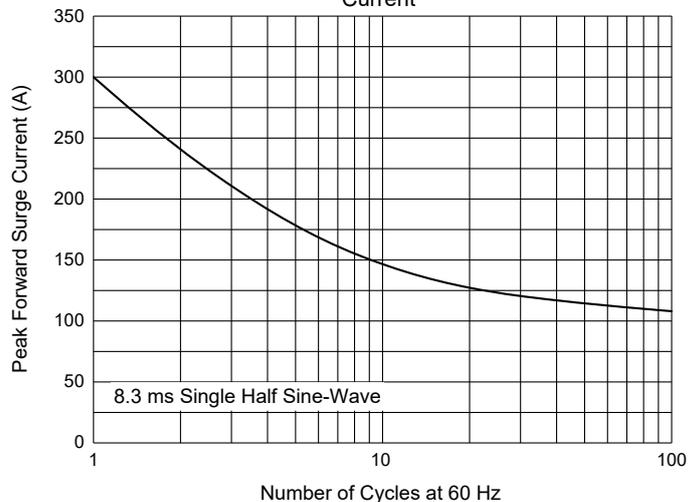


Fig. 3 - Typical Forward Characteristics

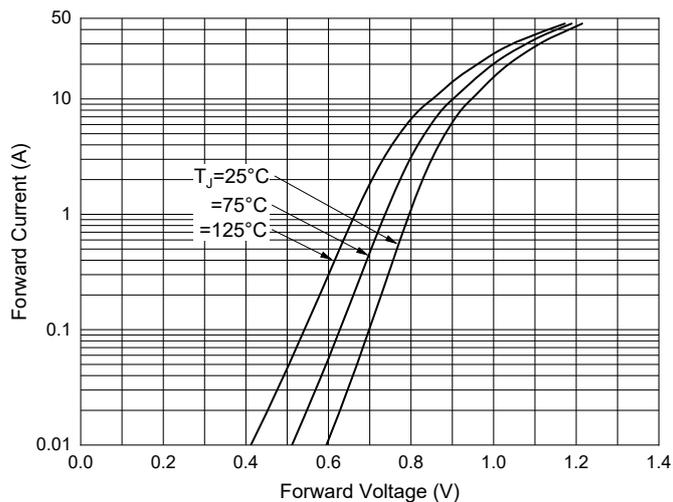


Fig. 4 - Typical Reverse Leakage Characteristics

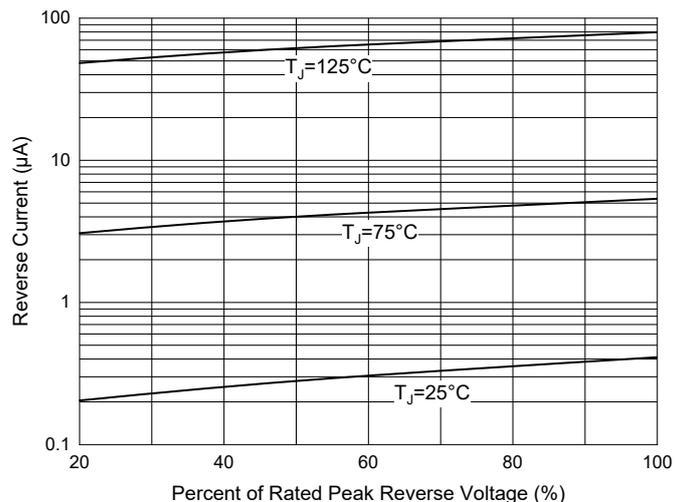
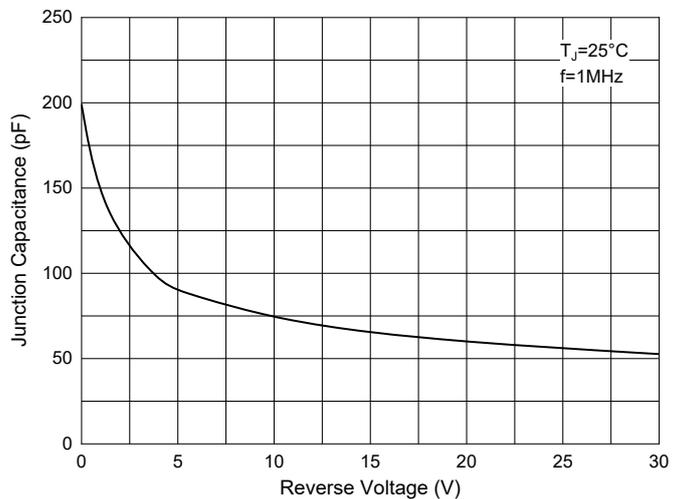


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

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

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