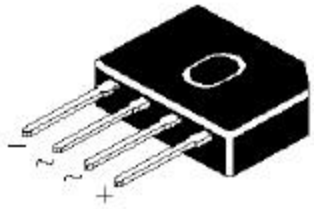
GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIERS

GBU8005 - GBU810



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PLASTIC PACKAGE

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25ºC Ambient temperature unless specified otherwise. Single phase, half wave, 60Hz resistive or inductive load. For capacitive load, derate current by 20%

DESCRIPTION	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heat sink) **	$I_{(AV)}$	8.0							A
Rectified output Current at T_c=100°C (without heatsink)		3.2							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum Forward Voltage at I_F=4.0A	V_F	1.0							V
Maximum DC Reverse Current at T_j=25°C	I_R	5.0							µA
at Rated DC Blocking Voltage Per Element at T_j=125°C		500							µA
Rating for Fusing (t < 8.3ms)	I^2t	166							A^2sec
Typical Junction Capacitance Per Element	*C_J	60							pF
Typical Thermal Resistance Junction to Case	**$R_{th\ (j-c)}$	2.2							ºC/W
Operating Junction Temperature Range	T_j	- 55 to +150							ºC
Storage Temperature Range	T_{stg}	- 55 to +150							ºC

***Measured at 1 MHz and applied reverse voltage of 4.0 V**

****Device mounted on 100mm x 100mm x 1.6mm Cu plate heatsink**

GBU8005_810Rev031005E

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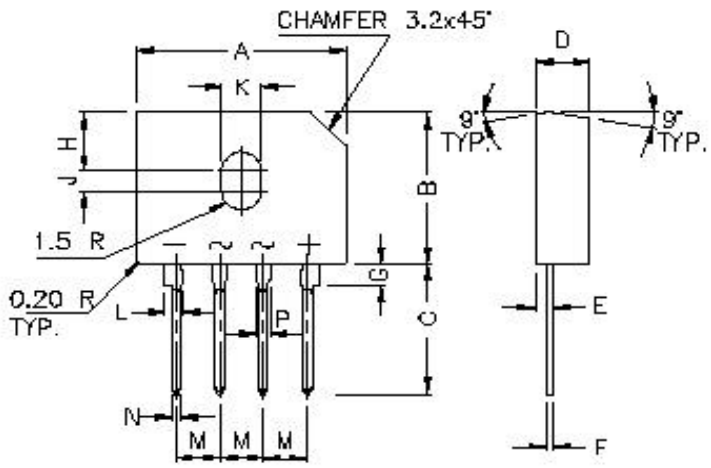
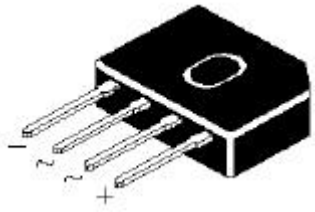
GBU Plastic Package



DIM	MIN.	MAX.
A	21.8	22.3
B	18.3	18.8
C	17.27	18.29
D	3.8	4.7
E	1.14	1.52
F	0.46	0.56
G	1.52	2.03
H	7.4	7.9
J	1.65	2.16
K	3.5	4.1
L	2.16	2.54
M	4.83	5.33
N	1.02	1.27
P	1.65	2.03

All dimensions are in mm
50 Pcs/BOX
1000 Pcs/Bulk Pack



GBU8005_810Rev031005E

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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