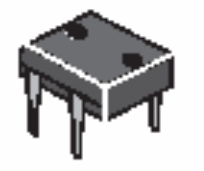
BRIDGE RECTIFIER

DB101 - DB107



DB-1
Leaded Plastic Package

High surge overload rating of 50A peak

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at T_a = 25°C unless specified otherwise, single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

DESCRIPTION	SYMBOLS	VALUE							UNIT
		DB101	DB102	DB103	DB104	DB105	DB106	DB107	
Maximum Recurrent Peak 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 Rectified Current at T_a=40°C	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0							A
Maximum Forward Voltage at 1.0A DC and 25ºC	V_F	1.1							V
Maximum Reverse Current T_a = 25°C at Rated DC Blocking Voltage T_a = 125°C	I_R	5.0 500							µA
Typical Junction Capacitance (Note 1)	C_j	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40.0							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15.0							°C/W
Operating Junction Temperature and Storage Temperature Range	T_j, T_{stg}	-55 to +150							°C

NOTES:

1. **Measured at 1 MHz and applied reverse voltage of 4.0 VDC.**
2. **Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.5 x 0.5" (13 x 13 mm) copper pads**

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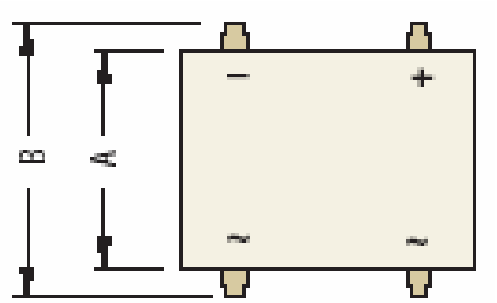

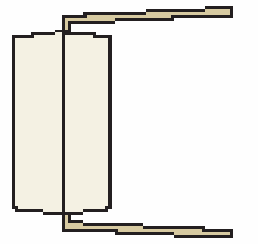

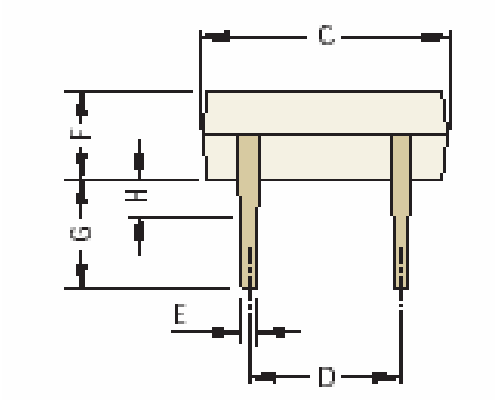

DIM	Min	Max
A	6.2	6.5
B	7.6	8.9
C	8.0	8.3
D	5.0	5.2

DIM	Min	Max
E		0.5
F	2.6	3.2
G	3.9	4.2
H		1.5

For Bulk Packaging Type Std Packing Qty is 1,000 and For Tube Packaging Type Std Packing Qty is 2,500

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).

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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 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).CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.

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