GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts

Forward Current - 10.0 Amperes

BR10 Series

BR8
Through Hole
Mounting Package
RoHS compliant

BR8

FEATURES:

1.Surge overload rating - 170 amperes peak
2. Low forward voltage drop
3. Small size; simple installation
4. Sliver plated copper leads
5. Mounting position: Any

APPLICATIONS: Single phase input rectification.

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER		SYMBOLS	BR 10005	BR 1001	BR 1002	BR 1004	BR 1006	BR 1008	BR 1010	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	30	70	140	280	420	560	700	V
Maximum Average Forward Rectifier Output Current at	T_c=50℃	$I_{(AV)}$	10.0							A
	T_c=100℃ (note1)		6.0							
	T_A=50℃ (Note2)		6.0							
Peak Forward Surge Current (8 .3ms Single Half Sine-Wave Super Imposed on Rated Load)		I_{FSM}	170							A
Maximum Forward Voltage Drop Per Bridge Element at 5.0A Peak		V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage Per Element	T_A=25℃	I_R	10.0							uA
	T_A=100℃		1.0							mA
Operating Temperature Range		T_J	-55 to + 150							℃
Storage Temperature Range		T_{STG}	-55 to + 150							℃

NOTES:

1.Unit mounted on metal chasis.

2. Unit mounted on PC board.

TYPICAL CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD SURGE CURRENT

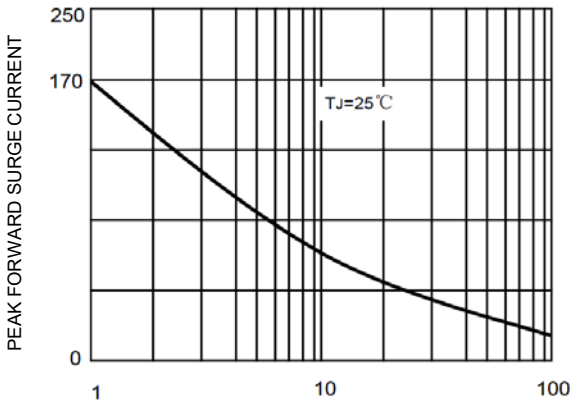


FIG.2-DERATING CURVE OUTPUT
RECTIFIED CURRENT

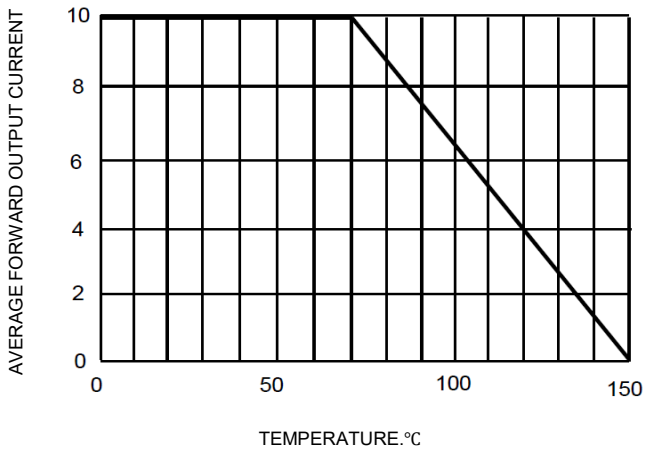


FIG.3-TYPICAL FORWARD VOLTAGE

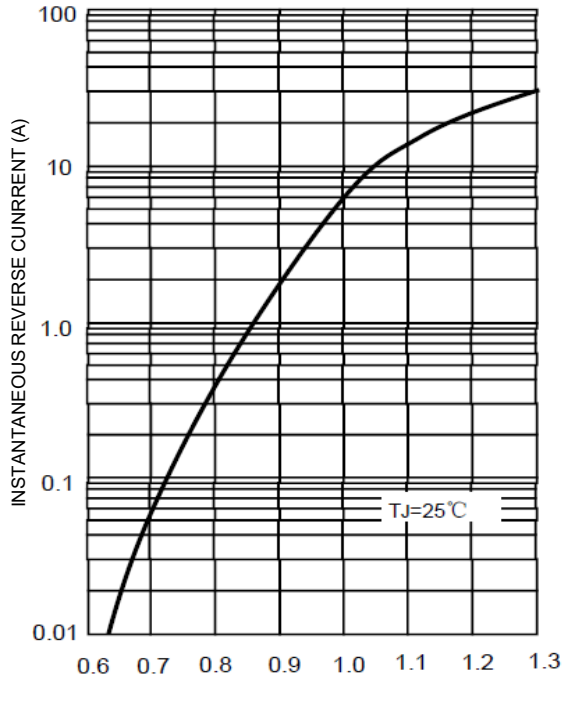
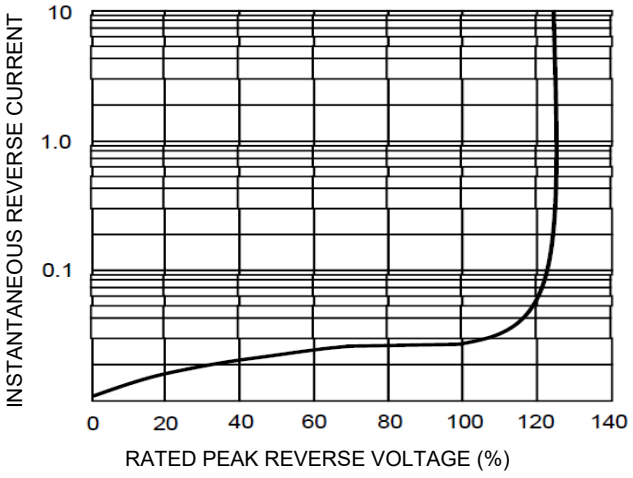
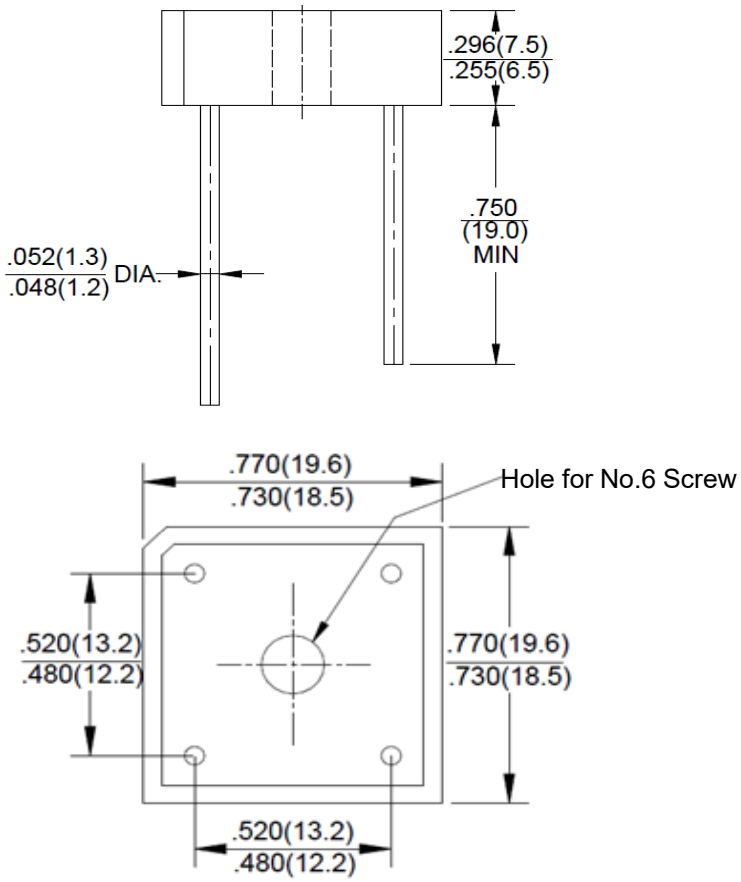


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE DETAILS

Package: BR8



Dimensions are in inches and in (milimeters)
Polarity Shown on side of case.
Positive lead at beveled corner.

Recommended Product Storage Environment for Discrete Semiconductor Devices

This storage environment assumes that the Diodes and transistors are packed properly inside the original packing supplied by CDIL.

- Temperature 5 °C to 30 °C
- Humidity between 40 to 70 %RH
- Air should be clean.
- Avoid harmful gas or dust.
- Avoid outdoor exposure or storage in areas subject to rain or water spraying .
- Avoid storage in areas subject to corrosive gas or dust. Product shall not be stored in areas exposed to direct sunlight.
- Avoid rapid change of temperature.
- Avoid condensation.
- Mechanical stress such as vibration and impact shall be avoided.
- The product shall not be placed directly on the floor.
- The product shall be stored on a plane area. They should not be turned upside dawn. They should not be placed against the wall.

Shelf Life of CDIL Products

The shelf life of products is the period from product manufacture to shipment to customers. The product can be unconditionally shipped within this period. The period is defined as 2 years.
If products are stored longer than the shelf life of 2 years the products shall be subjected to quality check as per CDIL quality procedure.
The products are further warranted for another one year after the date of shipment subject to the above conditions in CDIL original packing.

Floor Life of CDIL Products and MSL Level

When the products are opened from the original packing, the floor life will start.
For this, the following JEDEC table may be referred:

JEDEC MSL Level		
Level	**Time**	**Condition**
1	Unlimited	≤30 °C / 85% RH
2	1 Year	≤30 °C / 60% RH
2a	4 Weeks	≤30 °C / 60% RH
3	168 Hours	≤30 °C / 60% RH
4	72 Hours	≤30 °C / 60% RH
5	48 Hours	≤30 °C / 60% RH
5a	24 Hours	≤30 °C / 60% RH
6	Time on Label(TOL)	≤30 °C / 60% RH

Customer Notes

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).

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 wil 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.

CDIL is a registered trademark of
Continental Device India Pvt. Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone +91-11-2579 6150, 4141 1112 Fax +91-11-2579 5290, 4141 1119
email@cdil.com www.cdil.com
CIN No. U32109DL1964PTC004291

BR10 Series
Rev0_27032020EEG