

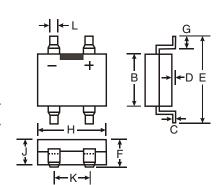
### 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

#### **Features**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automatic Assembly
- Miniature Package Saves Space on PC Boards
- UL Listed Under Recognized Component Index, File Number E94661
- Available in Lead Free Finish/RoHS Compliant Version (Note 3)

#### **Mechanical Data**

- Case: MiniDIP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture sensitivity: Level 1 per J-STD-020C
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 2026
- Also Available in Lead Free Plating (Matte Tin Finish). Please See Ordering Information, Note 5, on Page 3
- Polarity: As Marked on Case
- Weight: 0.125 grams (approx.)
- Marking: Type Number, Date Code & Polarity Markings



MiniDIP						
Dim	Min	Max				
В	3.6	4.0				
С	0.15	0.35				
D	_	0.20				
E	_	7.0				
F	_	3.00				
G	0.70	1.10				
Н	4.5	4.9				
J	2.3	2.7				
K	2.3	2.7				
L	0.50	0.80				
All Dimensions in mm						

## Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

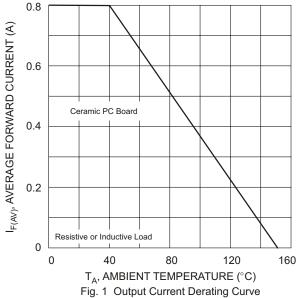
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

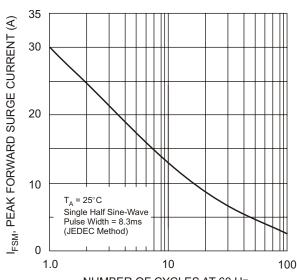
Characteristic	Symbol	HD01	HD02	HD04	HD06	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RMM</sub> V <sub>RWM</sub> V <sub>DC</sub>	100	200	400	600	V
RMS Reverse Voltage	V <sub>RMS</sub>	70	140	280	420	V
Average Forward Rectified Current (Note 1) T <sub>A</sub> = @ 40°C	Io	0.8			Α	
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30			А	
Instantaneous Voltage Drop @ 0.4A (per element)	V <sub>F</sub>	1.0			V	
Peak Reverse Current at Rated @ T <sub>A</sub> = 25°C DC Blocking Voltage (per element) @ T <sub>A</sub> = 125°C	I <sub>R</sub>	5.0 500			μА	
Typical Junction Capacitance (per element) (Note 2)	Cj	10			pF	
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	75				°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150				°C

Notes:

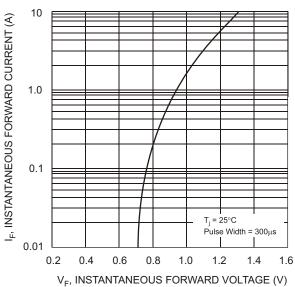
- 1. Mounted on Ceramic PC Board.
- 2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 V.
- 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.







NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Peak Forward Surge Current (per leg)



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V Fig. 2 Typical Forward Characteristics (per leg)

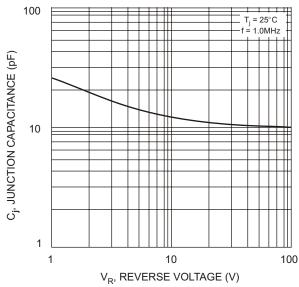
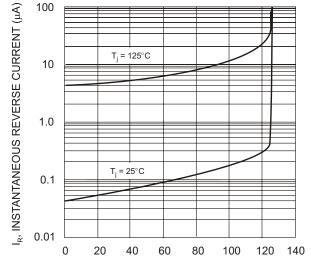


Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics (per element)



### Ordering Information (Notes 4 & 5)

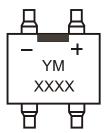
Device*	Packaging	Shipping
HDxx-T	MiniDIP	3K/Tape & Reel, 13-inch

<sup>\*</sup>xx = Device type, e.g. HD02-T or HD04-T, etc.

Notes:

- 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.
- 5. For Lead Free Finish/RoHS Compliant version part number, please add "-F" suffix to the part number above. Example: HD04-T-F.

# **Marking Information**



YM = Date code marking XXXX = Product type marking code, Ex: HD04