



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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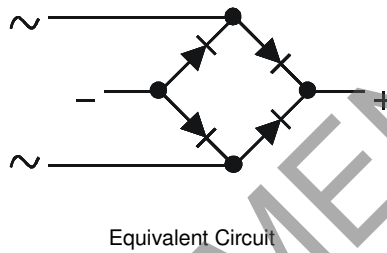
**0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER**

**Features and Benefits**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Miniature Package Saves Space on PC Boards
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**

**Mechanical Data**

- Case: MiniDIP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish — Tin. Plated Leads, Solderable per MIL-STD-202, Method 208 @3
- Polarity: As Marked on Case
- Marking: Product Type Marking Code, Date Code & Polarity Markings
- Weight: 0.125 grams (Approximate)



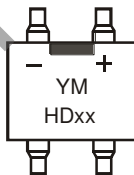
**Ordering Information** (Note 3)

Part Number*	Packaging	Shipping
HDxx-T	MiniDIP	3k/Tape & Reel, 13-inch

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

- Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
  2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
  3. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

**Marking Information**



HDxx = Product Type Marking Code (ex: HD04)  
 YM = Date Code Marking  
 Y = Last Digit of the Year  
 M = See Month/Code Table Below

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

### Maximum Ratings (@T<sub>A</sub> = +25°C, unless otherwise specified.)

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

Characteristic	Symbol	HD01	HD02	HD04	HD06	Unit
Peak Repetitive Reverse Voltage	V <sub>RMM</sub>					
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	200	400	600	V
DC Blocking Voltage	V <sub>DC</sub>					
RMS Reverse Voltage	V <sub>RMS</sub>	70	140	280	420	V
Average Forward Rectified Current (Note 4) @T <sub>A</sub> = +40°C	I <sub>O</sub>	0.8				A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	30				A

### Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 4)	R <sub>θJA</sub>	75	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

### Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
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	I <sub>R</sub>	5.0	μA
DC Blocking Voltage (Per Element) @T <sub>A</sub> = +125°C		500	
Typical Total Capacitance (Per Element) (Note 5)	C <sub>T</sub>	10	pF

Notes: 4. Mounted on PC Board.  
 5. Measured at 1.0MHz and applied reverse voltage of 4.0V.

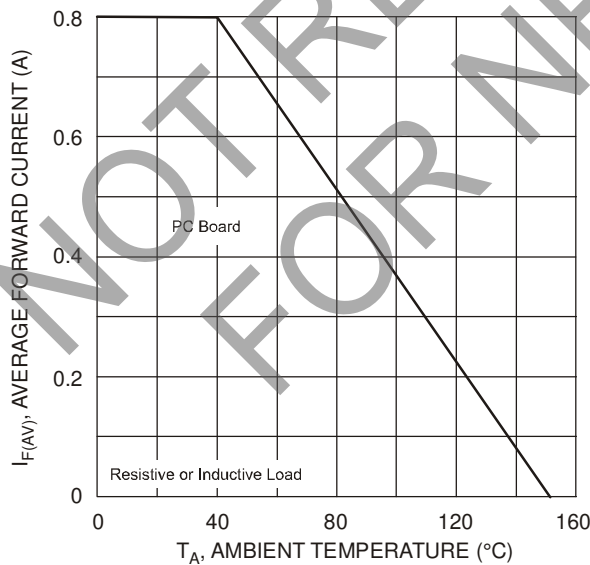


Fig. 1 Output Current Derating Curve

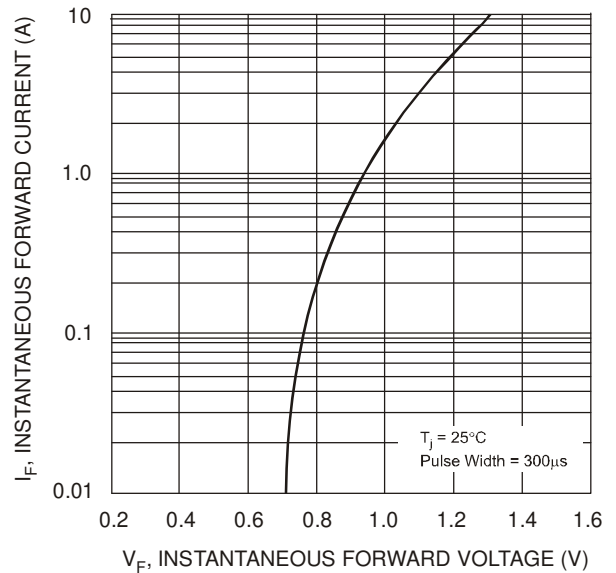


Fig. 2 Typical Forward Characteristics (per element)

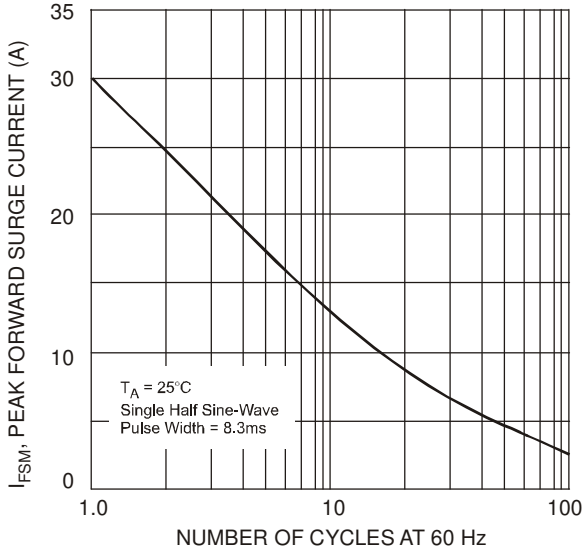


Fig. 3 Maximum Peak Forward Surge Current (per element)

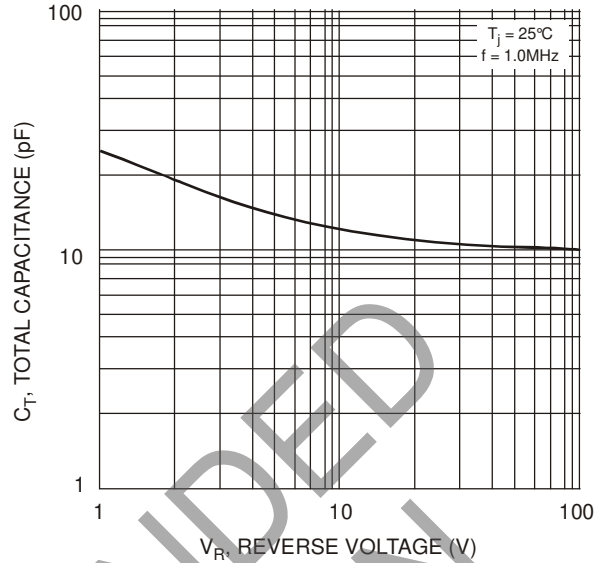


Fig. 4 Typical Total Capacitance (per element)

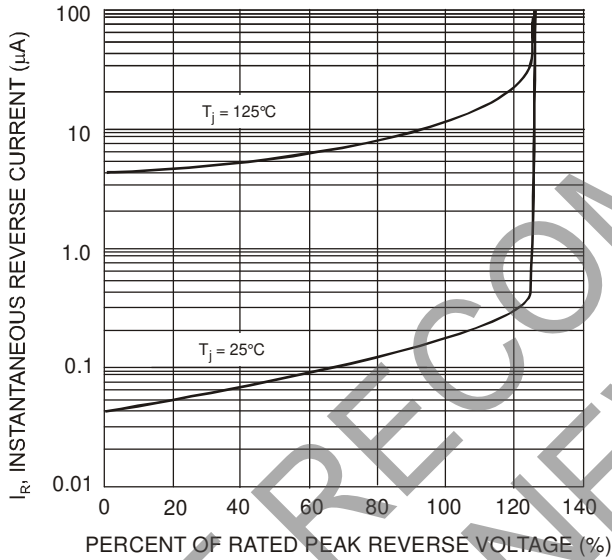


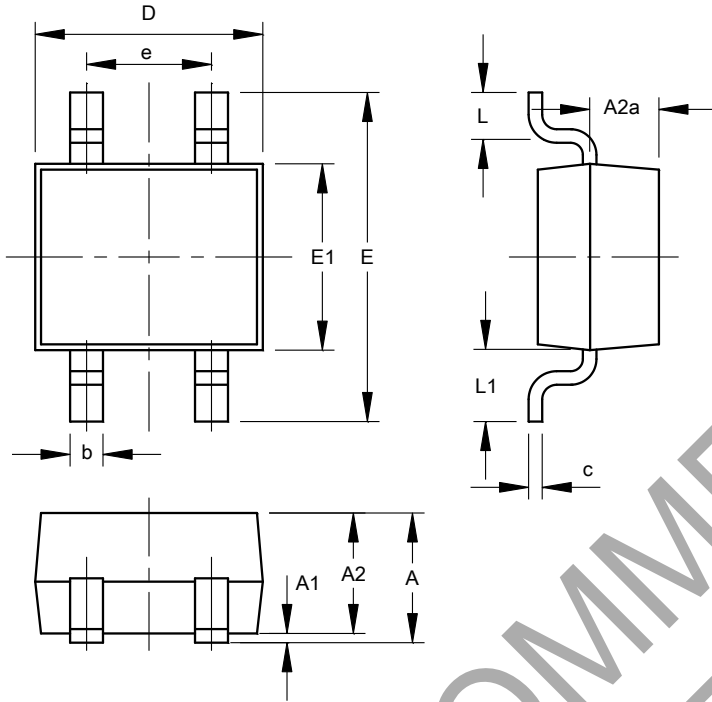
Fig. 5 Typical Reverse Characteristics (per element)

NOT RECOMMENDED FOR NEW DESIGN

### Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

#### MiniDIP

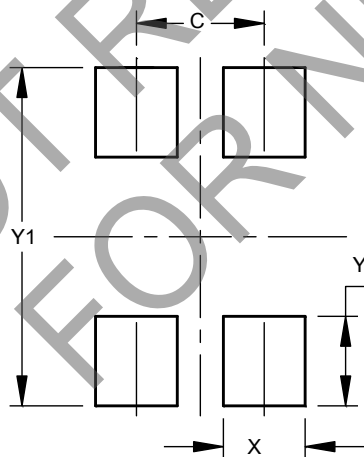


MiniDIP		
Dim	Min	Max
A	--	3.00
A1	--	0.20
A2	2.30	2.70
A2a	1.20	1.60
b	0.50	0.80
c	0.15	0.35
D	4.50	4.90
E	--	7.00
E1	3.60	4.00
e	2.30	2.70
L	0.70	1.10
L1	1.10	2.12
All Dimensions in mm		

### Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

#### MiniDIP



Dimensions	Value (in mm)
C	2.50
X	1.65
Y	1.80
Y1	6.80

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