

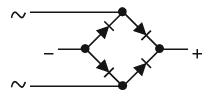
#### 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### **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 (Note 1)

#### **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 <sup>(3)</sup>
- Polarity: As Marked on Case
- Marking: Type Number, Date Code & Polarity Markings
- Weight: 0.125 grams (approximate)



**Equivalent Circuit** 

#### **Ordering Information** (Note 2)

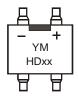
Device*	Packaging	Shipping
HDxx-T	MiniDIP	3K/Tape & Reel, 13-inch

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

Notes:

- 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes
- 2. For packaging details, visit our website at http://www.diodes.com.

## **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	0	N	D



## **Maximum Ratings** @ $T_A = 25$ °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 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	$V_{RMS}$	70	140	280	420	V
Average Forward Rectified Current (Note 3) @T <sub>A</sub> = 40°C	lo		0	.8		Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>		3	0		А

### **Thermal Characteristics**

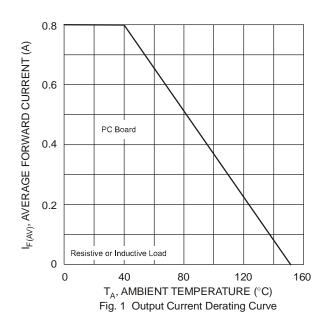
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 3)	$R_{ heta JA}$	75	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

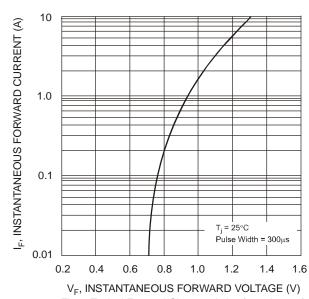
# Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

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 DC Blocking Voltage (per element) @T <sub>A</sub> = 125°C	I <sub>R</sub>	5.0 500	μΑ
Typical Total Capacitance (per element) (Note 4)	C <sub>T</sub>	10	pF

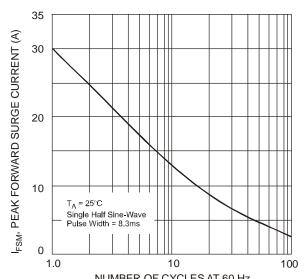
Notes:

- 3. Mounted on PC Board.4. Measured at 1.0 MHz and applied reverse voltage of 4.0V.

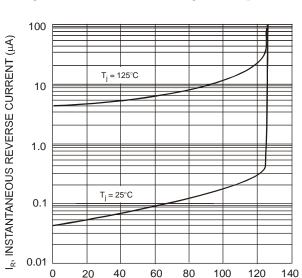




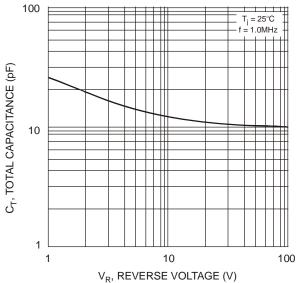




NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Peak Forward Surge Current (per element)

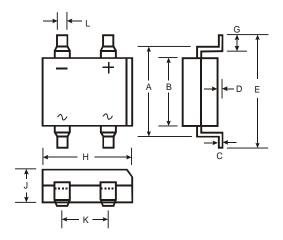


PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics (per element)



V<sub>R</sub>, REVERSE VOLIAGE (V)
Fig. 4 Typical Total Capacitance (per element)

# **Package Outline Dimensions**



MiniDIP				
Dim	Min	Max		
Α	5.43	5.75		
В	3.6	4.0		
C	0.15	0.35		
D	0.05	0.20		
Е	_	7.0		
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				



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