

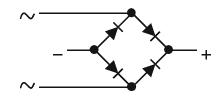
#### 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### **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 🔞
- 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

\*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	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	Ν	D



# **Maximum Ratings** $@T_A = 25$ <sup>°</sup>C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

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> Vdc	100	200	400	600	V
RMS Reverse Voltage	V <sub>RMS</sub>	70	140	280	420	V
Average Forward Rectified Current (Note 3) $@T_A = 40^{\circ}C$	lo		C	.8		Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub> 30					А

### **Thermal Characteristics**

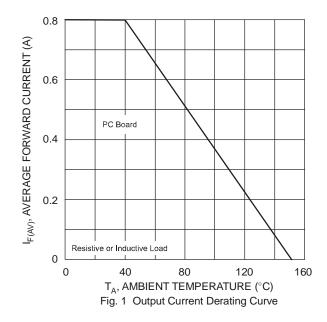
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 3)	$R_{ ext{ heta}JA}$	75	°C/W
Operating and Storage Temperature Range	TJ, T <sub>STG</sub>	-55 to +150	°C

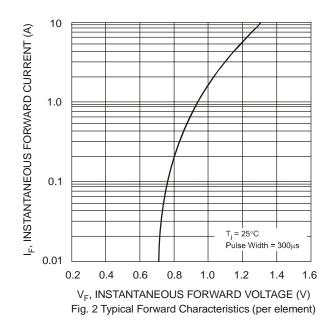
# Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Instantaneous Voltage Drop @ 0.4A (per element)	VF	1.0	V
Peak Reverse Current at Rated $@T_A = 25^{\circ}C$		5.0	
DC Blocking Voltage (per element) @T <sub>A</sub> = 125°C	IR	500	μΑ
Typical Total Capacitance (per element) (Note 4)	CT	10	pF

Notes: 3. Mounted on PC Board.

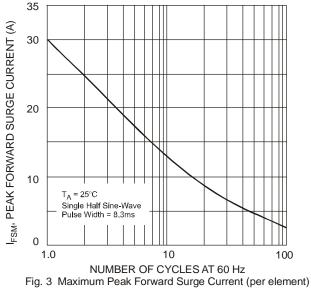
4. Measured at 1.0 MHz and applied reverse voltage of 4.0V.







# HD01 - HD06



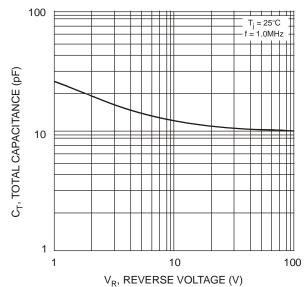
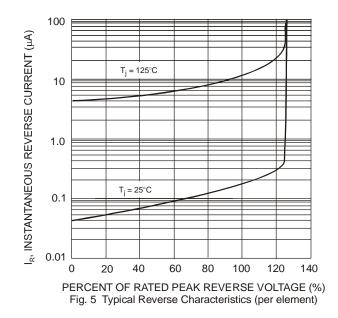
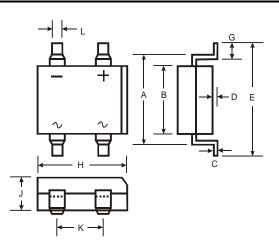


Fig. 4 Typical Total Capacitance (per element)



# **Package Outline Dimensions**



MiniDIP					
Dim	Min	Max			
Α	5.43	5.75			
В	3.6	4.0			
с	0.15	0.35			
D	0.05	0.20			
ш		7.0			
G	0.70	1.10			
<b>H</b> 4.5 4.9					
J 2.3 2.7					
K	K 2.3 2.7				
L 0.50 0.80					
All Dimensions in mm					



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