



HD01 - HD06

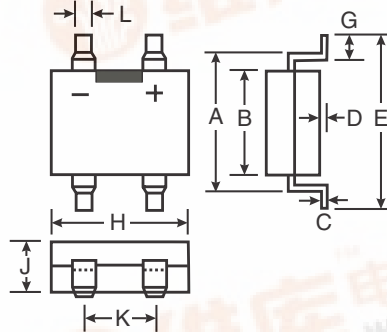
0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

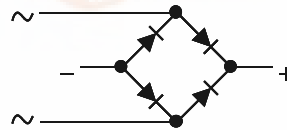
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automatic Assembly
- Miniature Package Saves Space on PC Boards
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Note 3)**

Mechanical Data

- Case: MiniDIP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture sensitivity: Level 1 per J-STD-020C
- Terminals: Finish — Tin. Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: As Marked on Case
- Marking: Type Number, Date Code & Polarity Markings
- Weight: 0.125 grams (approximate)



MiniDIP		
Dim	Min	Max
A	5.43	5.75
B	3.6	4.0
C	0.15	0.35
D	0.05	0.20
E	—	7.0
G	0.70	1.10
H	4.5	4.9
J	2.3	2.7
K	2.3	2.7
L	0.50	0.80
All Dimensions in mm		



Equivalent Schematic

Maximum Ratings and Electrical Characteristics @ T_A = 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	V _{RRM}	100	200	400	600	V
Working Peak Reverse Voltage	V _{RWM}					
DC Blocking Voltage	V _{DC}					
RMS Reverse Voltage	V _{RMS}	70	140	280	420	V
Average Forward Rectified Current (Note 1) T _A = @ 40°C	I _O	0.8				A
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load	I _{FSM}	30				A
Instantaneous Voltage Drop @ 0.4A (per element)	V _F	1.0				V
Peak Reverse Current at Rated DC Blocking Voltage (per element) @ T _A = 25°C @ T _A = 125°C	I _R	5.0 500				μA
Typical Total Capacitance (per element) (Note 2)	C _T	10				pF
Typical Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	75				°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-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.



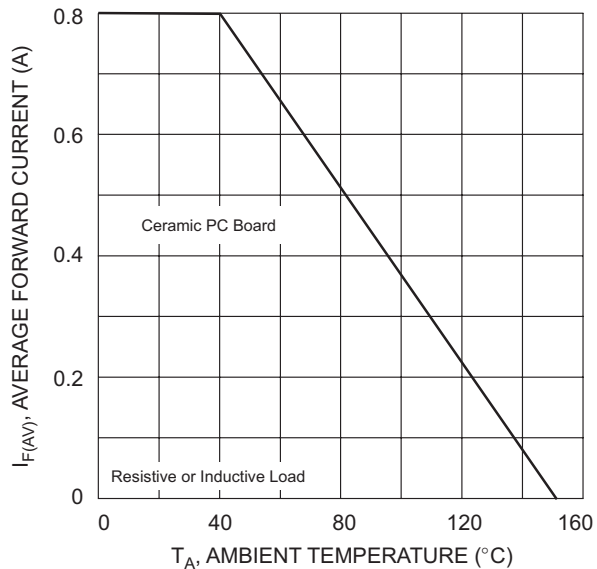


Fig. 1 Output Current Derating Curve

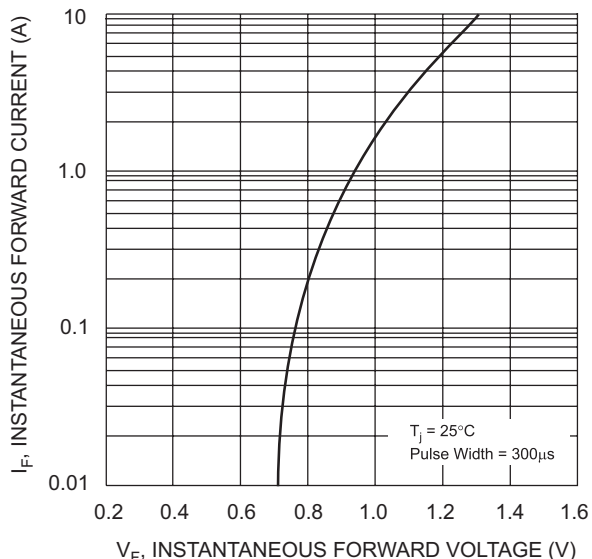


Fig. 2 Typical Forward Characteristics (per element)

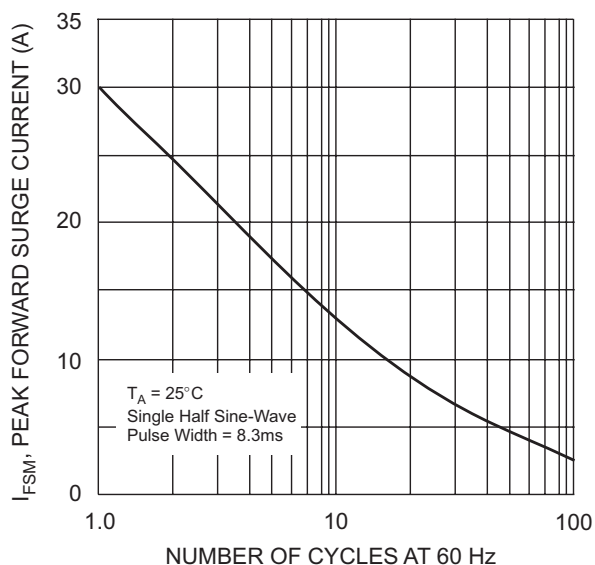


Fig. 3 Maximum Peak Forward Surge Current (per element)

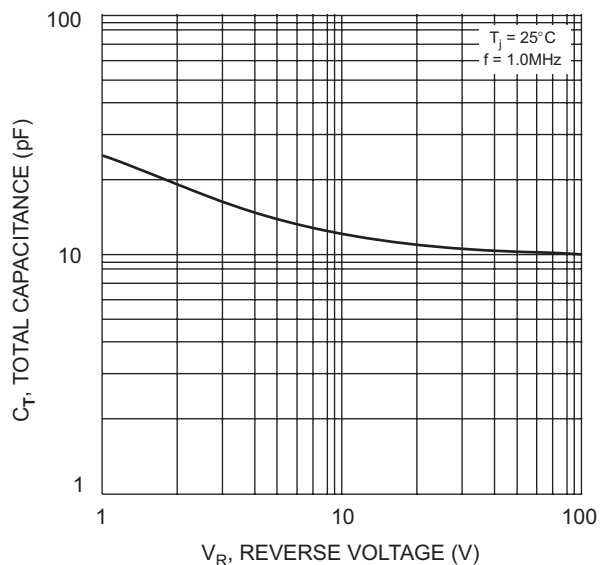


Fig. 4 Typical Total Capacitance (per element)

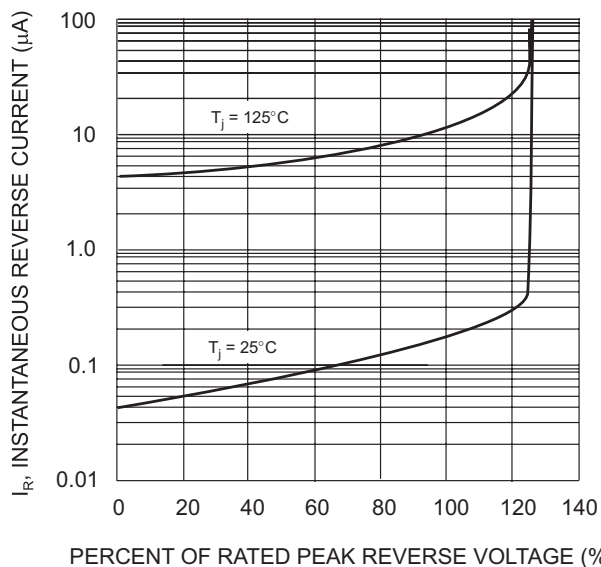


Fig. 5 Typical Reverse Characteristics (per element)



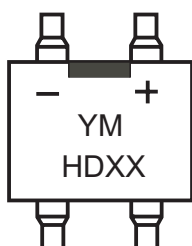
Ordering Information (Note 4)

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

*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>.

Marking Information



YM = Date code marking
Y = Last digit of the year
M = See Month/Code Table Below
HDXX = Product type marking code,
Ex: HD04

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

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