

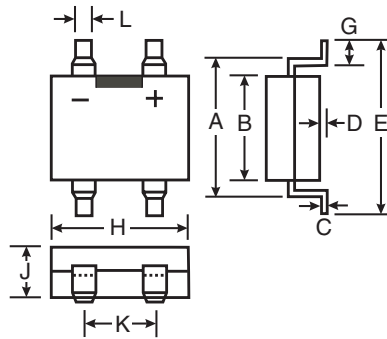
0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

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)**

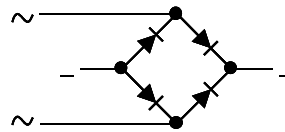
Mechanical Data

- 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) | 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*.

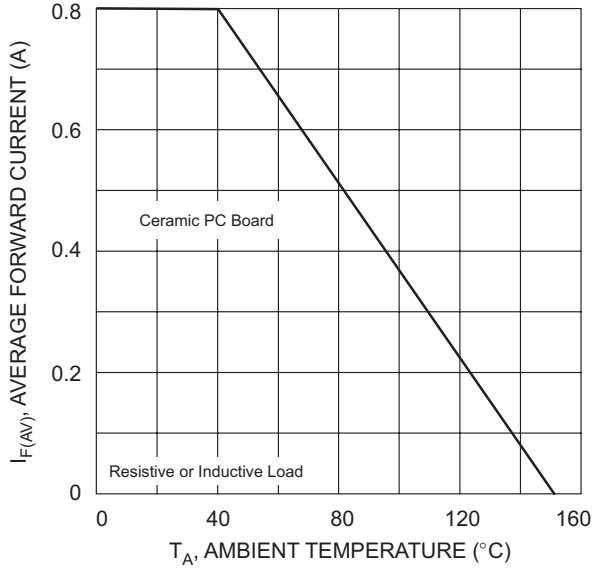


Fig. 1 Output Current Derating Curve

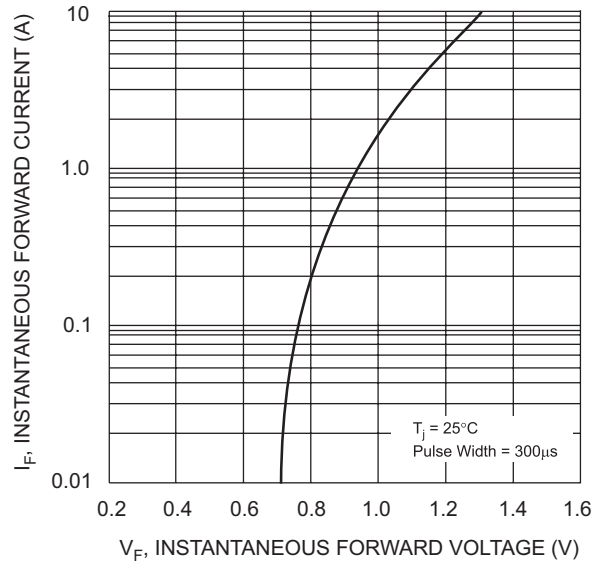


Fig. 2 Typical Forward Characteristics (per element)

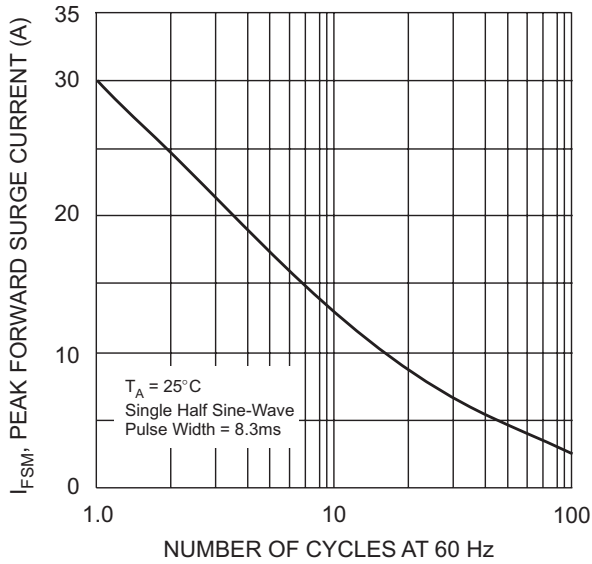


Fig. 3 Maximum Peak Forward Surge Current (per element)

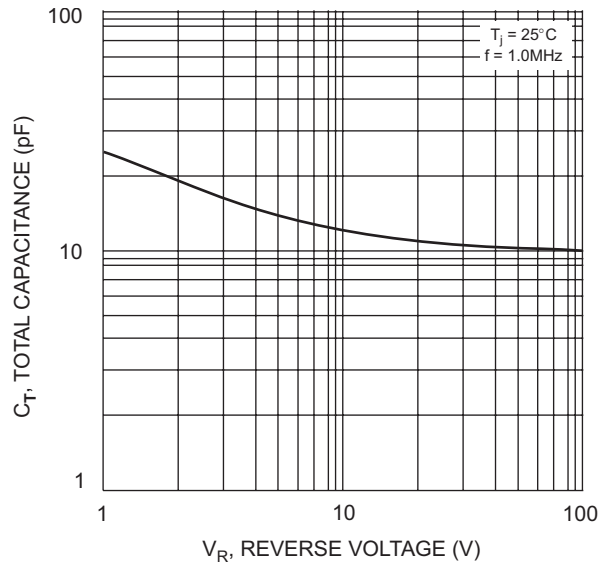


Fig. 4 Typical Total Capacitance (per element)

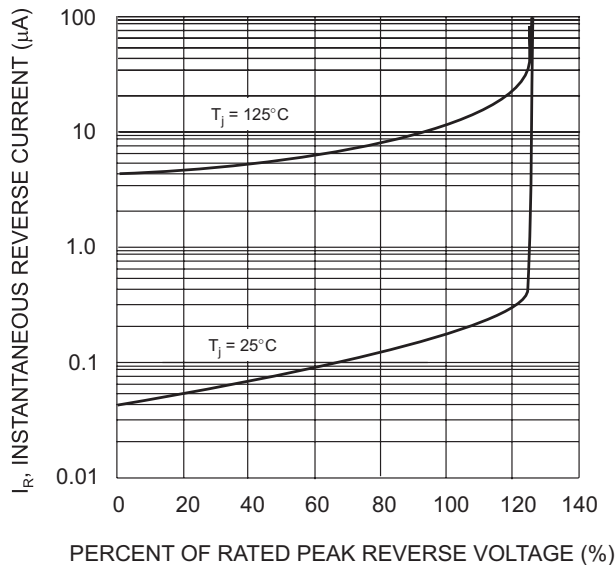


Fig. 5 Typical Reverse Characteristics (per element)

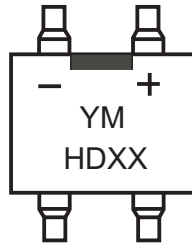
Ordering Information (Note 4)

| 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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