

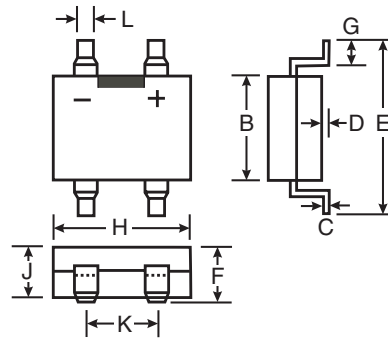
0.5A SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIER

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
- **Lead Free Finish, RoHS Compliant (Note 4)**

Mechanical Data

- Case: MiniDIP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Finish — Bright Tin. Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Marking: Type Number
- Weight: 0.125 grams (approx.)



| MiniDIP | | |
|----------------------|------|------|
| Dim | Min | Max |
| B | 3.6 | 4.0 |
| C | 0.15 | 0.35 |
| D | — | 0.20 |
| E | — | 7.0 |
| F | — | 3.00 |
| 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 | | |

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

| Characteristic | Symbol | RH02 | RH04 | RH06 | Unit |
|---|---|-------------|------|------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _{DC} | 200 | 400 | 600 | V |
| RMS Reverse Voltage | V _{RMS} | 140 | 280 | 420 | V |
| Average Forward Rectified Current (Note 1) T _A = @ 40°C | I _O | 0.5 | | | A |
| Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method) | I _{FSM} | 30 | | | A |
| Instantaneous Voltage Drop @ 0.4A (per element) | V _F | 1.15 | | | V |
| Peak Reverse Current at Rated DC Blocking Voltage (per element) | I _R | 5.0 100 | | | μA |
| Maximum Reverse Recovery Time (Note 3) | t _{rr} | 150 | | 250 | ns |
| Typical Junction Capacitance (per element) (Note 2) | C _j | 13.0 | | | pF |
| Typical Thermal Resistance, Junction to Ambient (Note 1) | R _{θJA} | 85 | | | K/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -55 to +150 | | | °C |

- Notes:
1. Mounted on Glass Epoxy PC Board.
 2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 V.
 3. t_{rr} test conditions: I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

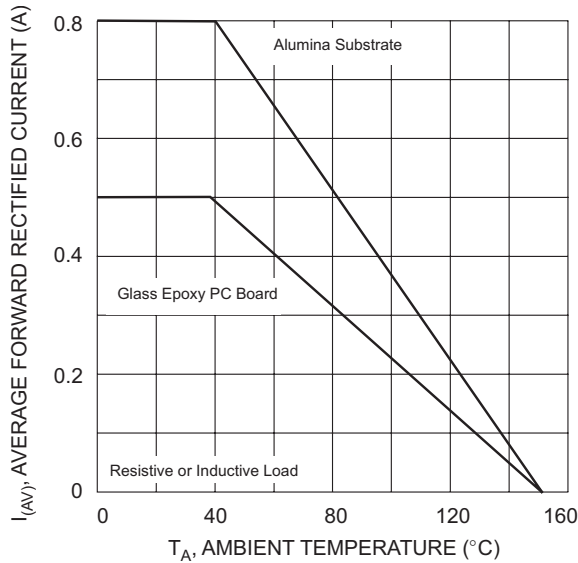


Fig. 1 Output Current Derating Curve

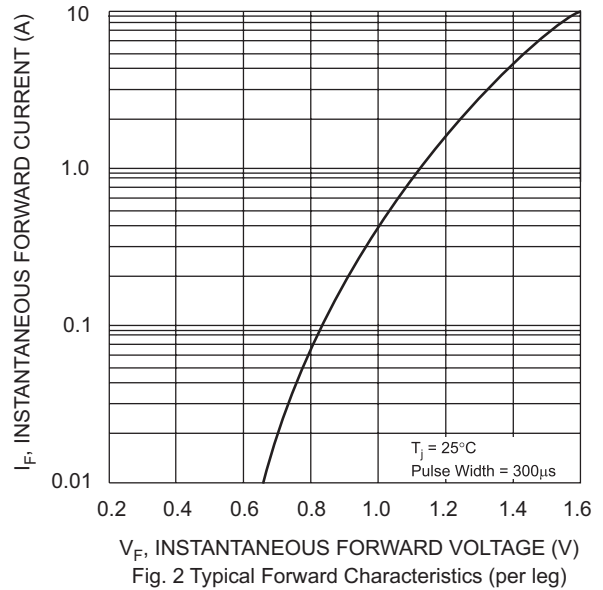


Fig. 2 Typical Forward Characteristics (per leg)

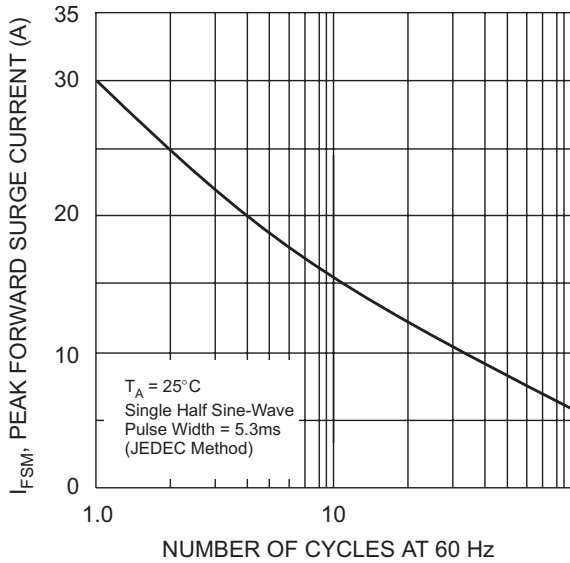


Fig. 3 Maximum Peak Forward Surge Current (per leg)

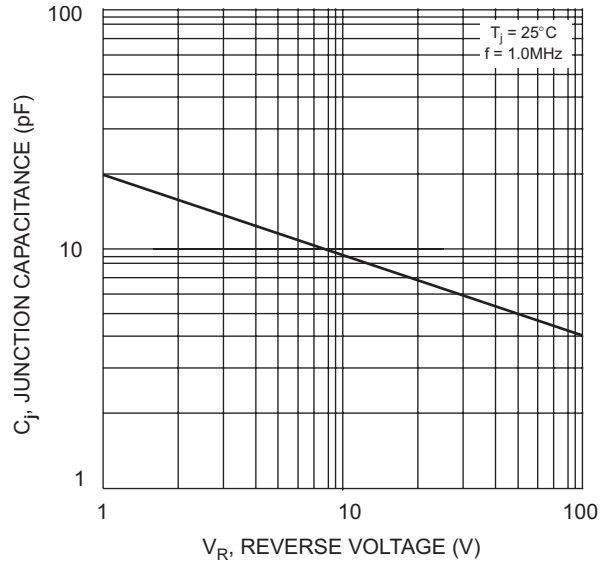


Fig. 4 Typical Junction Capacitance

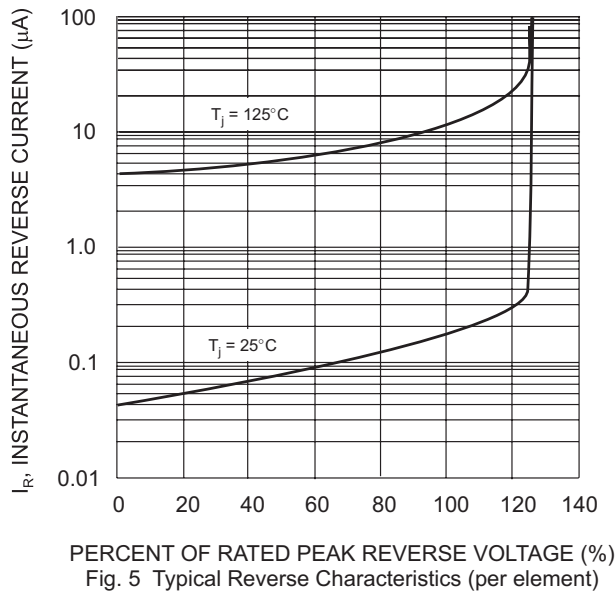


Fig. 5 Typical Reverse Characteristics (per element)

Ordering Information (Note 5)

| Device | Packaging | Shipping |
|---------------|------------------|------------------|
| RH0x-T | MiniDIP | 3000/Tape & Reel |

Notes: 5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.