

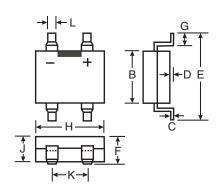
0.5A SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIER

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		
В	3.6	4.0		
С	0.15	0.35		
D	_	0.20		
E	_	7.0		
F	_	3.00		
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				

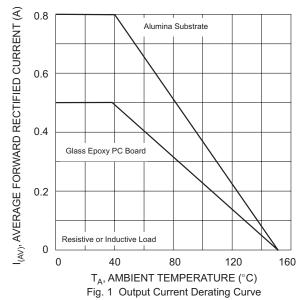
Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	RH02	RH04	RH06	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RMM} 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	Io		0.5		А
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30		А	
Instantaneous Voltage Drop @ 0.4A (per element)	V _F	1.15		V	
Peak Reverse Current at Rated $@T_A = 25^{\circ}C$ DC Blocking Voltage (per element) $@T_A = 125^{\circ}C$	I _R	5.0 100			μА
Maximum Reverse Recovery Time (Note 3)	t _{rr}	1	150	250	ns
Typical Junction Capacitance (per element) (Note 2)	Cj	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.





I_F, INSTANTANEOUS FORWARD CURRENT (A) 0.1 0.01 0.2 0.4 0.6 8.0

1.0

V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics (per leg)

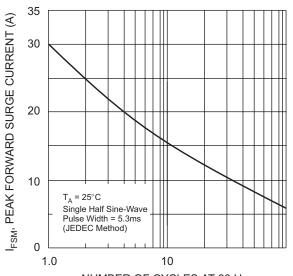
1.0

T_j = 25°C

1.2

Pulse Width = 300μs

1.4



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

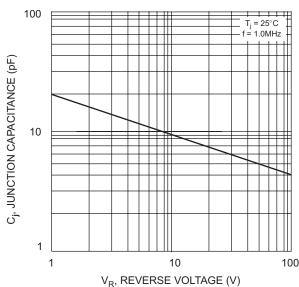
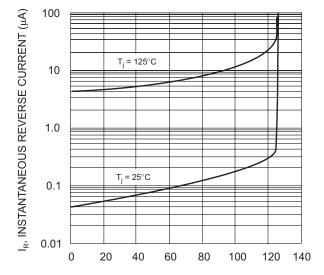


Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) 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.