

# RH02 - RH06

### 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		
к	2.3	2.7		
L	0.50	0.80		
All Dimensions in mm				

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

Characteristic	Symbol	RH02	RH04	RH06	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RMM</sub> V <sub>RWM</sub> V <sub>DC</sub>	200	400	600	V
RMS Reverse Voltage	V <sub>RMS</sub>	140	280	420	V
Average Forward Rectified Current (Note 1) $T_A = @ 40^{\circ}C$	Ι <sub>Ο</sub>	0.5		•	Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30			А
Instantaneous Voltage Drop @ 0.4A (per element)	VF	1.15			V
Peak Reverse Current at Rated@ $T_A = 25^{\circ}C$ DC Blocking Voltage (per element)@ $T_A = 125^{\circ}C$	I <sub>R</sub>	5.0 100			μA
Maximum Reverse Recovery Time (Note 3)	t <sub>rr</sub>	1	50	250	ns
Typical Junction Capacitance (per element) (Note 2)	Cj	13.0			pF
Typical Thermal Resistance, Junction to Ambient (Note 1)	R <sub>0JA</sub>	85			K/W
Operating and Storage Temperature Range	Tj, T <sub>STG</sub>	-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.





PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics (per element)

80

100

120

140

60

0.01 0

20

40



# Ordering Information (Note 5)

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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.