



**Product  
Bulletin**

**200-04**

**MICROSORB HPJ**  
**High Performance Jaumann**  
**Outdoor Absorber**

**GENERAL DESCRIPTION**

**MICROSORB HPJ** (high performance Jaumann) is a very high performance microwave absorber that maintains electrical performance in harsh environments. It is highly recommended for outdoor applications where broadband or very high electrical performance is required.

**MICROSORB HPJ** is a type of Jaumann absorber which achieves its absorption through tightly controlled thin resistive layers separated by low loss dielectric spacers. This design enables very high absorption levels to be achieved over a broad band in a relatively thin absorber.

**MICROSORB HPJ's** weatherability is due to the closed cell nature of the dielectric spacer material.

**MICROSORB HPJ** typically exhibits -20 dB or better absorption over a wide frequency band but if your application does not require broadband performance but rather very high performance over a narrower band, **HPJ** can be easily tuned to your band thereby achieving better than -30 dB absorption depending on your bandwidth.

**APPLICATION**

For best performance, **MICROSORB HPJ** must be mounted with its back face in contact with a metallic reflecting surface.

**MICROSORB HPJ -M** is available with an integral metal foil backing.

- ❖ Pressure Sensitive Transfer Adhesive or Velcro® on the back surface, for ease of application.
- ❖ Fabrication of material into shapes to your specific drawing requirements. We offer die-cutting, and water-jet services.

**SPECIFICATIONS**

Color White  
 Service Temperature, °F (°C) -40 to 180 (-40 to 82)

**MICROSORB HPJ** is available in a three layer variety (HPJ-73,74,75) which gives good performance (20-25 dB) over a relatively narrow band (3:1 bandwidth). (HPJ-X4-875) is a 4 layer type which gives excellent performance over a very wide band (4-20 GHz). HPJ is also available in different custom configurations to optimize performance for a given application. Talk to one of our engineers about what could be done for your application.

<u>GRADE</u>	<u>Thickness</u>	<u>Density (lbs/ft<sup>2</sup>)</u>
<b>MICROSORB HPJ-373</b>	0.45"	0.15
<b>MICROSORB HPJ-374</b>	0.85"	0.40
<b>MICROSORB HPJ-375</b>	1.25"	0.60
<b>MICROSORB HPJ-X4-875</b>	0.88"	0.40

**SIZES**

**MICROSORB HPJ** is available in sheet 24" x 24"  
 Other sizes are available.

- Microsorb offers custom thicknesses. Please contact your **MICROSORB** Customer Service Department to discuss your specific requirements.



32 Mechanic Avenue Unit 211 • Woonsocket RI 02895

Tel. 401-767-2269

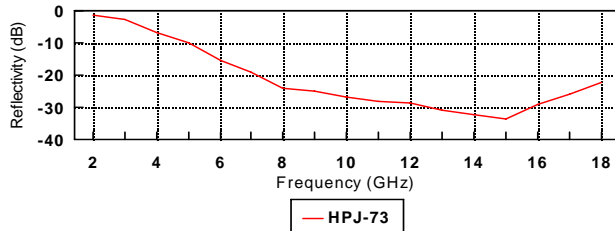
Fax 401-767-2255

www.microsorbtech.com

E-mail: engineer@microsorbtech.com

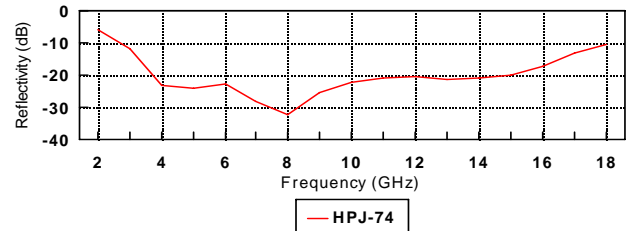
### HPJ-73 REFLECTIVITY

Measured Performance



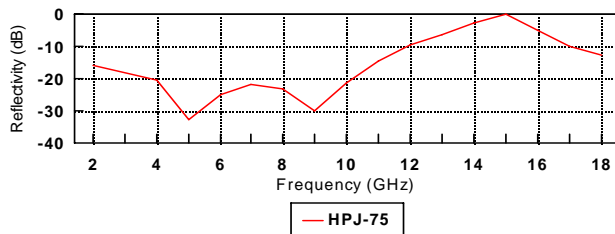
### HPJ-74 REFLECTIVITY

Measured Performance



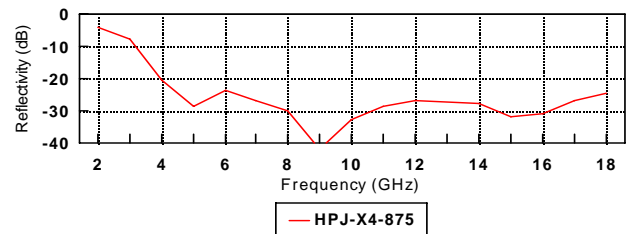
### HPJ-75 REFLECTIVITY

Measured Performance



### HPJ-X4-875 REFLECTIVITY

Measured Performance



Warranty: This information is, to the best of Microsorb Technologies knowledge, accurate as of the date indicated. This information relates only to the specific materials designated herein and is not intended for the application or use of the materials with any other materials or in any process. The information is intended as a general guide only and does not constitute a warranty or representation whatsoever and MICROSORB TECHNOLOGIES HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES ARISING FROM THE USER'S RELIANCE ON OR USE OF THIS INFORMATION. REV 2 041607