

## ABS-NBSE series

### Flexible frequency tuned microwave absorber

ABS-NBSE absorbers are a range of single frequency tuned microwave absorbers with magnetic loading. Tuned absorbers or resonant frequency absorbers are produced for specific frequencies and a narrow frequency band. ABS-NBSE is produced for a range of frequencies from 1 to 26 GHz.

The resonance or the absorbers reflectivity performance at the discrete frequency is obtained by installing the absorber sheet on a metal background.

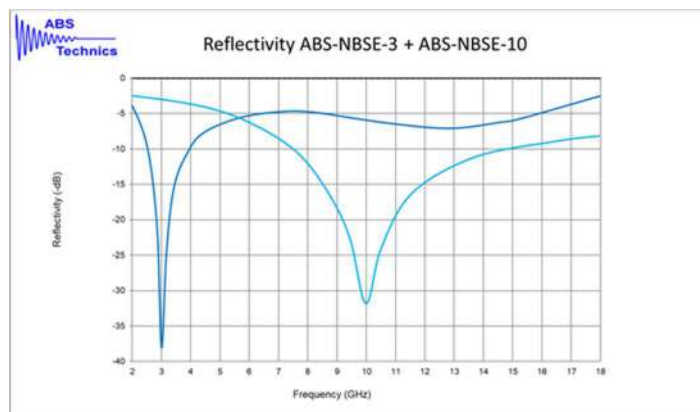
The absorber sheets can be supplied with a self-adhesive backing or can be installed using an adequate liquid adhesive. Silicone absorber material allow a temperature applications and applications where low outgassing is a requirement.

#### Applications :

- ABS-NBSE is produced for a range of frequencies from 1 to 26 GHz.
- Typically used in free space applications with respect to far field conditions.
- Lining of metal structures such as ships masts and air craft applications
- Treatment of specific frequencies.
- RCS (radar cross section) reduction
- Occasionally ABS-NBSE is also used to suppress surface currents and cavity resonances.

#### Specifications :

The absorber is designed to obtain a reflectivity level of -20 dB at the given specific frequency Related to the frequency of operation ABS-NBSE is produced in different thicknesses, typically between 1 and 5mm.



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### Properties :

Thin and flexible absorber sheets based on a silicone rubber.

Thickness : 1 to 5mm

Max. service temperature : 170°C

Hardness (shore A) : 75

Density (g/cc) : 2,5 to 4.2

### Availability :

Standard outside dimensions are 305x305mm, the thickness is related to the frequency and varies from 1 mm up to 5mm. Specific customized shapes are available on request. Customized parts can be delivered die-cut or kiss-cut.

If required the absorber sheet material can be supplied with a self-adhesive backing.

Typically for low outgassing applications it is preferred to bond the material using a liquid silicone adhesive, in most cases a primer needs to be applied prior to adhesive.