



### EMI NOISE SUPPRESSION ABSORBER:

NoiseSorb NS1000 series is an ultrathin near field noise suppression absorber product used for EMI control in electronic devices. The absorber is designed for the frequency range from 20 MHz up to 2 GHz. It is used to mitigate EM energy; it interacts and suppresses the magnetic field at the noise source.

### FEATURES AND BENEFITS

- High magnetic permeability
- RoHs, Halogen Free
- Outstanding temperature stability
- Low outgassing

### MARKETS

- Consumer electronics including smart phones & tablets
- Industrial electronics including automotive/infotainment

### SPECIFICATIONS

| TYPICAL PROPERTY                 | NOISESORB NS1000 SERIES |
|----------------------------------|-------------------------|
| Initial permeability @ 1 MHz     | 110                     |
| Effective frequency range        | 20 MHz – 2 GHz          |
| Specific gravity (g/cc)          | 3.5                     |
| Thickness (mm)                   | 0.06, 0.10, 0.20, 0.40  |
| Thickness tolerance              | +/- 10%                 |
| Operating temperature range (°C) | -40 up to 105           |
| Surface resistivity (Ω)          | 10 <sup>6</sup> min.    |
| Thermal conductivity (W/mK)      | 1.0                     |
| Tensile strength (Mpa)           | 35                      |
| Outgassing (%TML) (%CVCM)*       | 0.186/0.011             |

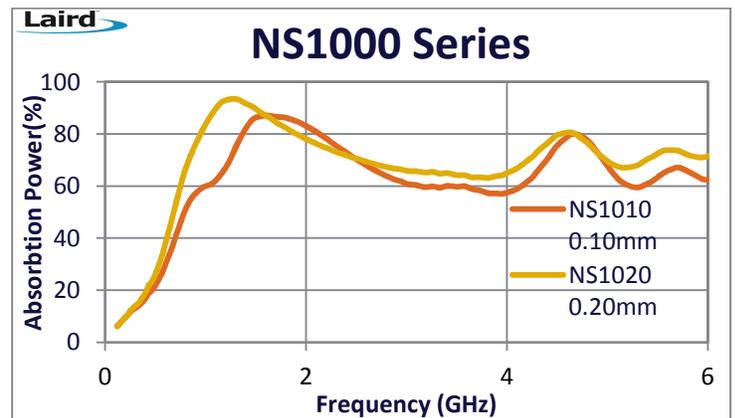
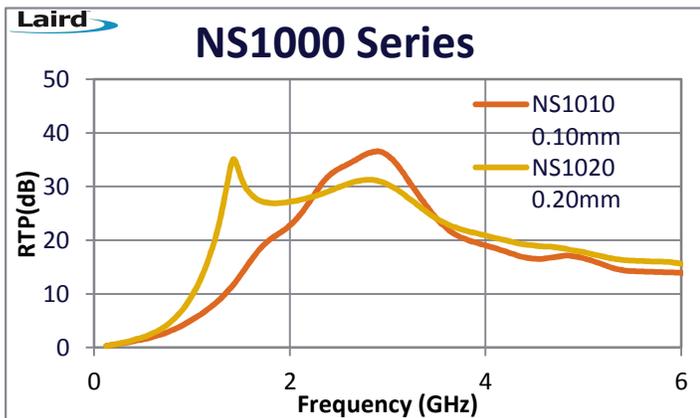
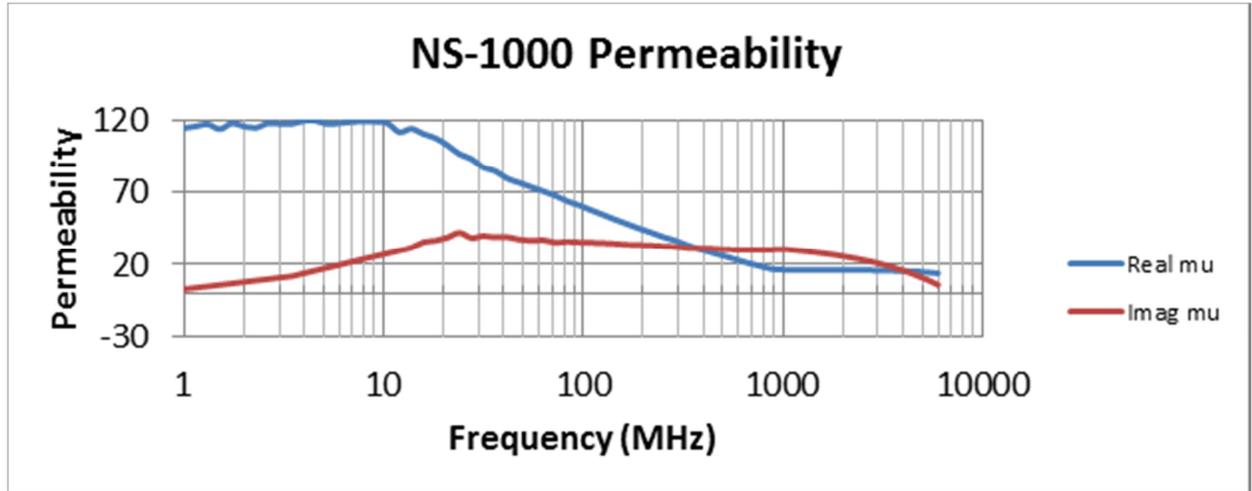
Data for design engineer guidance only. Observed performance varies in application.

Engineers are reminded to test the material in application.

\*Outgassing data per ASTM E595-07; criteria for acceptability is 1.00% TML and 0.10% CVCM.

### APPLICATIONS

- NoiseSorb NS1000 series absorber can be placed over CPUs, main chip sets and other memory and power IC devices to suppress radiated noise causing interference with RF functions, crosstalk or SAR emissions
- It can be used to suppress noise currents from circuit trace lines and flat cables that act like radiating antennas causing EMI problems and crosstalk issues
- It can also be applied to high speed transmission lines, LCD displays and circuit board elements that are radiating energy and causing EMI issues
- When placed within a cavity that is operating in the lower microwave frequencies, NoiseSorb NS1000 series has proven to be effective in damping resonances and reducing surface currents.



### AVAILABILITY

- Available in four standard thicknesses: 0.06mm (.002"), 0.10mm (.004"), 0.20mm (.008") and 0.40mm (.016)
- Standard sheet size 210mm X 300mm
- Includes 0.05mm transfer tape for self-adhesive application
- Product can be supplied as cut parts to customer print.
- Samples available upon request; standard sample size is 100mm X 100mm

### NS1000 SERIES ORDERING SYSTEM

- Last two digits represent thickness of sheet in hundredths of a millimeter (XX/100mm)
- For example, P/N NS10XX where XX is 10 = 0.10mm X 210mm X 300mm (standard sheet size)
- Suffix after P/N represents sample size. For example, NS1020S = 0.20mm X 100mm X 100mm

RFP-DS-NS1000 022117

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non-infringement of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trademarks or registered trademarks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.