

High-performance EMI/RFI absorber sheets

Introduction

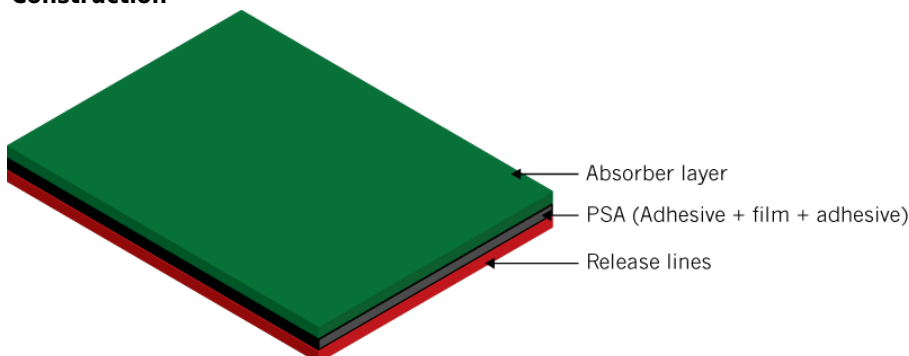
The high-performance EMI (electromagnetic interference) absorber and noise suppression series developed by Holland Shielding Systems B.V. can eliminate noise effectively. This product is made with magnetic metal powder. Through the distributed and mixed process, there is a Microwave absorbing sheet made of rubber sheets. As use of wide frequency band increases, this products absorbs and controls unnecessary electronic microwaves (noise). You can solve EMC/EMI problems by attaching EM absorber and noise suppression sheets simply on (part of) the noise sources.

The high performance EMI absorber sheet series is designed for applications where high noise suppression is needed in a broad frequency range. Examples are applications in the construction of medical and military devices.

Advantages

- Perfect suppression of radiation noise.
- High electrical resistance ($1 \times 10^9 \Omega$)
- Flexible and easy to handle/apply with single-side adhesive, even on a rounded side.
- Can be manufactured in many shapes, sizes and thickness according to CAD drawing

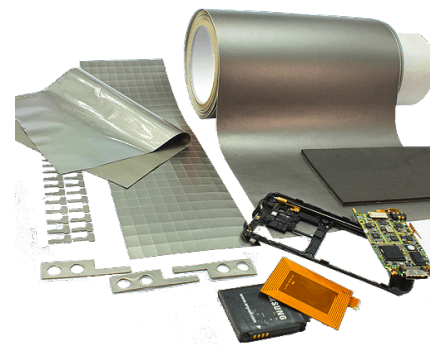
Construction



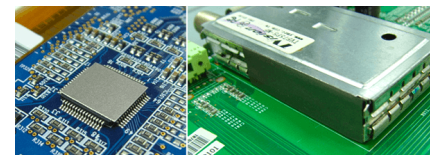
5790 High-performance EMI/RFI absorber sheets, construction



The complete range of high-performance EMI/RFI absorber sheets



High-performance EMI/RFI absorber sheets can be cut into any shape



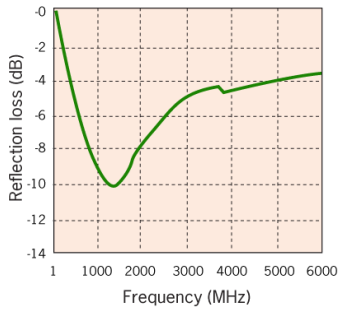
High-performance EMI/RFI absorber sheets can easily be attached to the source of interference with the PSA

Technical specifications

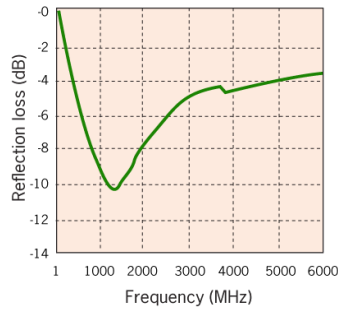
| Part number | Unit | 5790-ES11 | 5790-ES12 | 5790-ES31 | 5790-ES45 | 5790-ES46 | 5790-ES47 | 5790-ES48 | |
|----------------------|-------------------|-----------------------------|--------------------|------------------------------|----------------|----------------|----------------|------------------------------|--|
| Feature | | Wide band | Wide band | Wide band, High permeability | Standard | Wide band | Wide band | Wide band, High permeability | |
| Structure | | Single layer | | | | | | | |
| Frequency range | | 10 MHz to 6 GHz | | | | | | | |
| Permeability | | 55 ± 5 (@13.56MHz) | 60 ± 5 (@13.56MHz) | 130 ± 5 (@5MHz) | 25 ± 5 (@5MHz) | 70 ± 5 (@3MHz) | 80 ± 5 (@3MHz) | 95 ± 5 (@3MHz) | |
| Operating temp. | °C | -30 ~ +80 | | | | | | | |
| Density | g/cm ³ | 3.7 ± 0.3 | 3.7 ± 0.3 | 3.7 ± 0.3 | 3.5 ± 0.3 | 3.5 ± 0.3 | 3.5 ± 0.3 | 3.7 ± 0.3 | |
| Surface resistance | Ω/sq | >1 × 10 ⁶ | | | | | | | |
| Standard thickness | mm | 0.1 mm (others on request) | | | | | | | |
| Standard dimensions | mm | 200x300 (others on request) | | | | | | | |
| Adhesion | gf/25mm | Min 1,000 | | | | | | | |
| Environmental issues | | RoHS compliant | | | | | | | |

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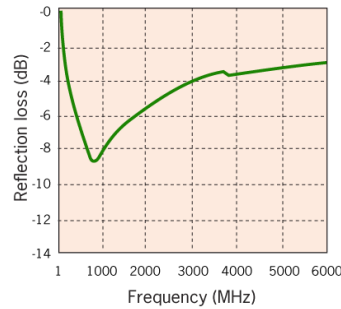
Reflection loss



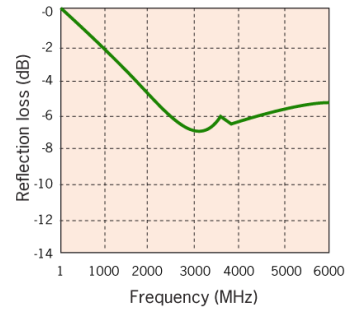
5790-ES11 Reflection Loss



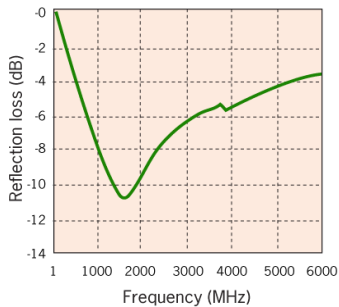
5790-ES12 Reflection Loss



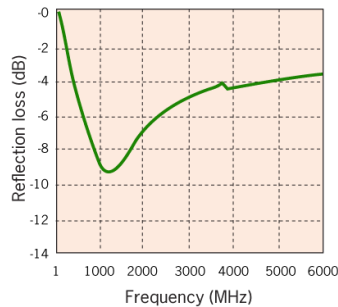
5790-ES31 Reflection Loss



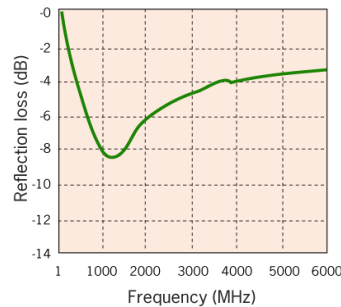
5790-ES45 Reflection Loss



5790-ES46 Reflection Loss



5790-ES47 Reflection Loss



5790-ES48 Reflection Loss

5790 - High performance EMI/RFI absorber sheets

| Series | Type | Width (mm) | Length (mm) |
|-------------|---|---|--|
| 5790 | Select an option: | | |
| | ES11 : Wide band 55 ± 5 (@13.56MHz) | Specify the width of the absorber sheet in mm | Specify the length of the absorber sheet in mm |
| | ES12 : Wide band 60 ± 5 (@13.56MHz) | | |
| | ES31 : Wide band, High permeability 130 ± 5 (@3MHz) | | |
| | ES45 : Standard 25 ± 5 (@3MHz) | | |
| | ES46 : Wide band 70 ± 5 (@3MHz) | | |
| | ES47 : Wide band 80 ± 5 (@3MHz) | | |
| | ES48 : Wide band, High permeability 100 ± 5 (@3MHz) | | |

Note: The **red** blocks are required