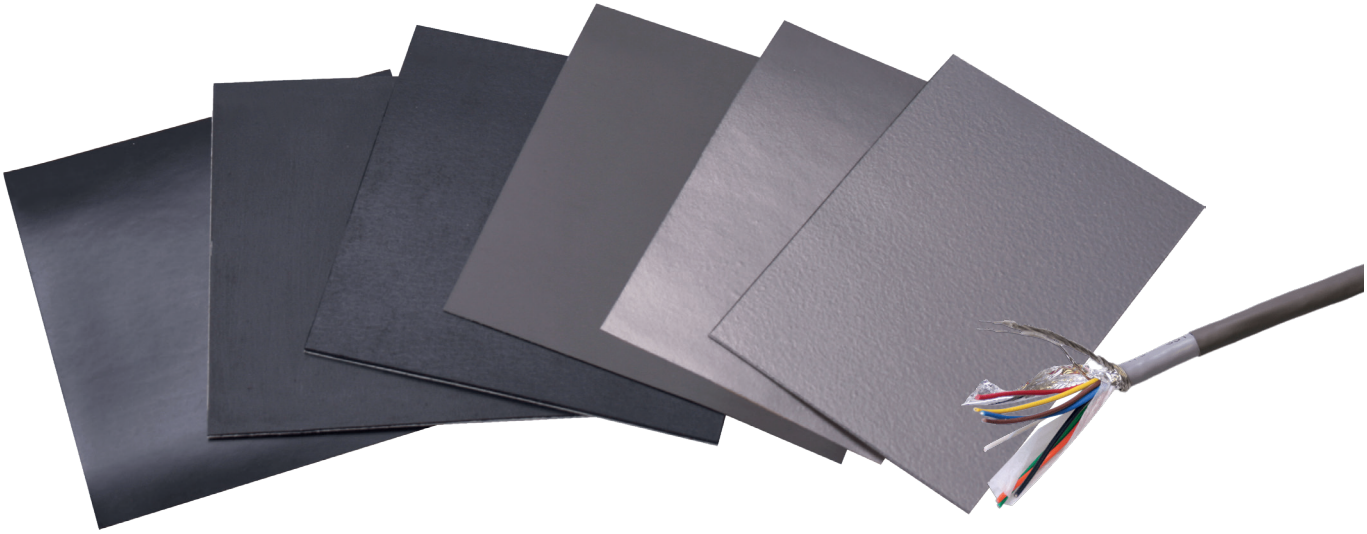
EMI ABSORBER SHEETS 5780

The EMI flexible absorber sheets, developed for electro-magnetic-wave absorption and noise suppression, can eliminate noise effectively



The EMI flexible absorber sheets, developed for electromagnetic-wave absorption and noise suppression, can eliminate noise effectively. EMC/EMI problems are solved by attaching noise-suppression sheets simply on the parts that are sources of noise.

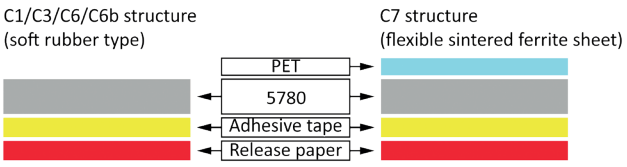
FEATURES AND ADVANTAGES

- Very flexible and easy to handle
- Can be delivered in any shape, size and/or thickness
- Optionally available as a custom-made tube
- Can be cut according to the customer's drawings
- Provides effective EMI suppression in a wide frequency range (1MHz to 18GHz)
- Changes the magnetic flux path to avoid interference with other components or surrounding cables
- Reduces the eddy current when the magnetic flux is close to metal
- Non-conductive adhesive backing (UL recognized) available
- Effective in preventing resonance and suppressing coupling
- High surface resistance (>10^6 Ω)
- Easy and fast to process due to self-adhesive

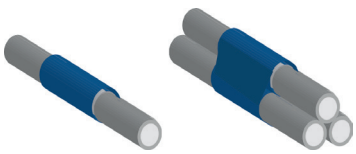
APPLICATIONS

- RFID (Radio Frequency Identification) systems
- NFC (Near-field communication)
- Wireless power chargers (WPC / Qi)
- Computers (NB / desktop / tablet) and peripherals
- Digital Products
- Mobile phones / smartphones / phablet
- Wireless equipment
- EMI-shielding box / black box
- Between printed circuit boards
- On IC's, processors, and controllers
- On cables that need high flexibility

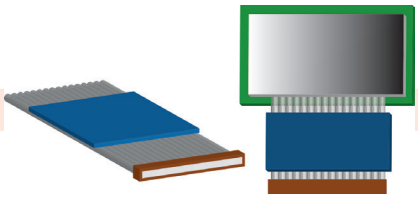
MATERIAL STRUCTURE



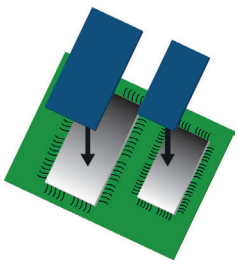
USAGE EXAMPLES



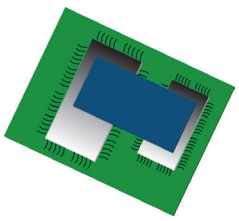
Example 1: Wrapped around a cable



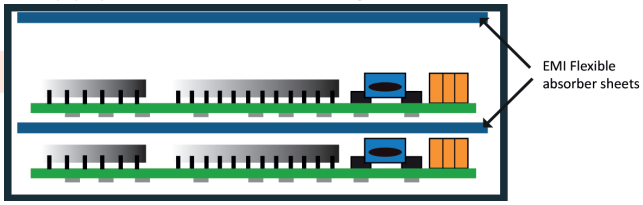
Example 2: Applied to a flat cable



Example 3: Applied to an integrated circuit (IC) top



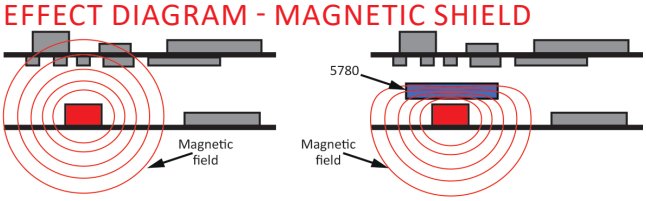
Example 4: Applied between integrated circuits



Example 5: Applied to case and between boards

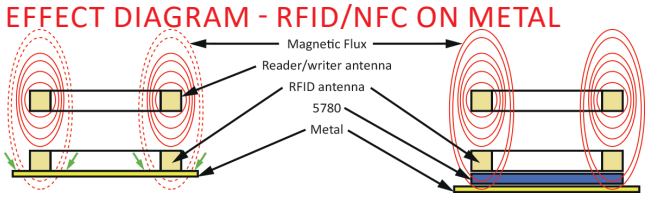
» EMI ABSORBER SHEETS 5780

EFFECT DIAGRAM - MAGNETIC SHIELD



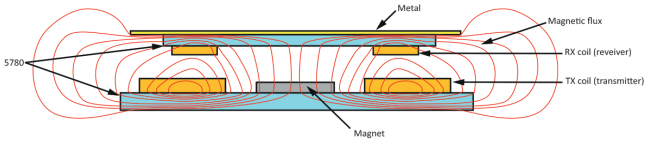
5780 EMI flexible absorber sheets can change the magnetic flux path to keep the magnetic flux from affecting other components.

EFFECT DIAGRAM - RFID/NFC ON METAL



5780 EMI Flexible absorber sheets can be used for a wireless power charger to avoid eddy current when the RX coil is attached to metal; this changes the magnetic flux path between TX coil, RX coil, and magnet.

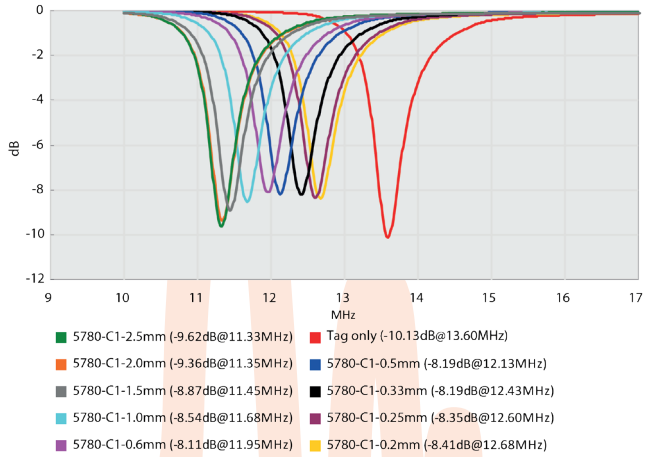
EFFECT DIAGRAM - HIGH FREQUENCY POWER CHARGER



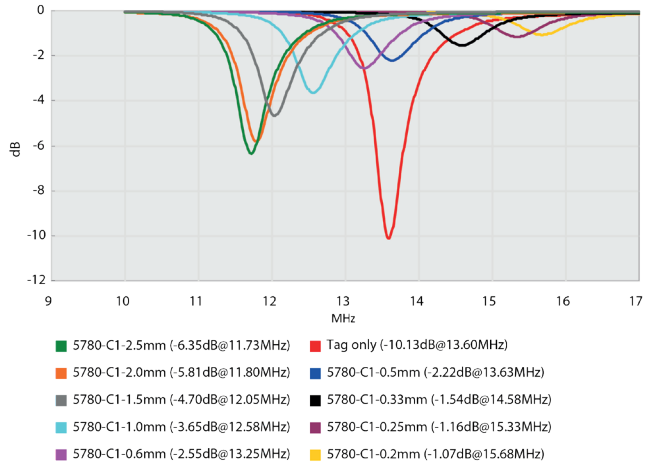
5780 EMI Flexible absorber sheets can be used for a wireless power charger to avoid eddy current when the RX coil is attached to metal. This changes the magnetic flux path between TX coil, RX coil, and magnet.

THE VARIATION OF RESPONSE FREQUENCY WHEN RFID TAG + 5780 + METAL (REFERENCE)

The response frequency is become lower when 5780 thickness become thick but the signal strength with little difference.

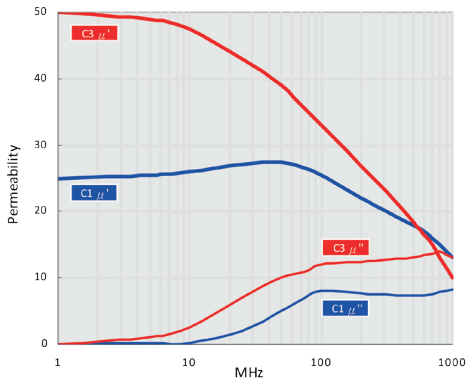


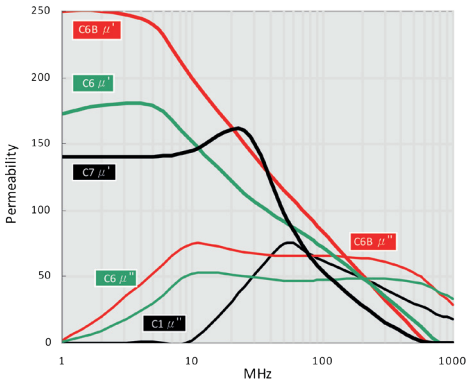
The response frequency is increase when metal attached, but the signal strength is smaller if the 5780 thickness is thinner. It means the metal affect more when the 5780 is thinner.



- The dimensions of the 5780 and metal are 85.6x54mm.
- The RFID tag is standard ISO card size (85.6x54mm) with HF TI 2048 chip.

PERMEABILITY (μ = μ' – J μ'') :





Jacobus Lipsweg 124, NL-3316 BP
Dordrecht, The Netherlands
Ph: +31(0)78 - 204 90 00
Fax: +31(0)78 - 204 90 08
info@hollandshielding.com
hollandshielding.com