

3M™ EMI Absorber & Magnetic Shielding Material AB3000 Series



Engineered Advantage: High Performance, Low Interference



Introducing our advanced 3M™ EMI Absorber & Magnetic Shielding Material AB3000 Series, a magnetic near-field absorber for 1–10 GHz, built as a composite of carrier resin and magnetic fillers with acrylic PSA (optional). It couples efficiently to the electromagnetic field to absorb near-field EMI noise while also reducing EMI transmission and reflection.



This technology helps an antenna work more efficiently by reducing the noise sources in close proximity. It utilizes special absorbing materials tuned to important frequencies (approx. 2 to 7 GHz), including Wi-Fi 5, Wi-Fi 6E, and sub-6 bands. This helps block unwanted signals and keep connections steady.

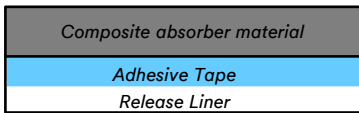
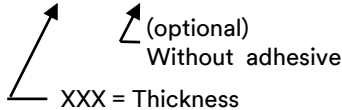


At higher frequencies, it helps improve the signal-to-noise ratio, so the device gets clearer signal and less interference (EMI). It also comes in multiple thickness options, letting designers choose the size that fits their product while keeping strong performance.



Construction and options

AB3XXX(-WO)



Product Series Thicknesses:

- 3M absorber AB3010; 0.100mm magnetic + 0.010mm PSA*
- 3M absorber AB3030; 0.300mm magnetic + 0.030mm PSA*
- 3M absorber AB3050; 0.500mm magnetic + 0.030mm PSA*
- 3M absorber AB3010-WO; 0.100mm magnetic, no PSA*
- 3M absorber AB3030-WO; 0.300mm magnetic, no PSA*
- 3M absorber AB3050-WO; 0.500mm magnetic, no PSA*

* PSA : Pressure Sensitive Adhesive

Key Industries

- Consumer electronics
- Automotive
- General Industrial

Links to sales materials

- Product Page
- [Technical Data Sheet](#)
- Regulatory Data Sheet
- [EMI/RFI Control - Industrial Electronics | 3M US Selection Guide](#)

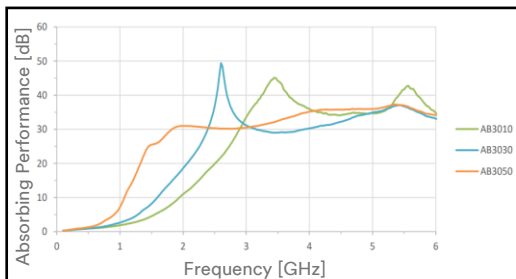
Technical Highlights



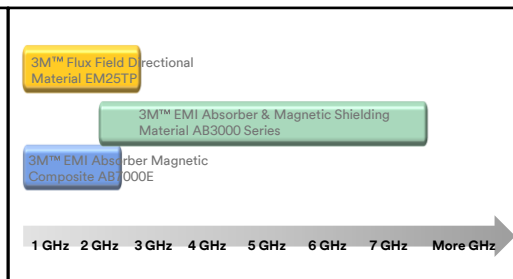
Efficiently absorbing the frequency range like Wi-Fi 5, Wi-Fi 6E, and sub-6 bands



One thickness won't cover low and high frequencies at the same time. Check your target frequency and pick your product



Absorber Performance



Frequency Coverage

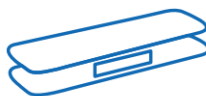
Applications



Cable Wrapping/ Attachment



Attached to semiconductor chip/ Micro-processors



Insert between Module (Compartment)



Attached to noise (traces, IC's, reflective Enclosure surface)

**Dedicated to empowering engineers
by providing innovative solutions
that help them enhance their product
performance and reliability.**

Transforming how work gets done.

Safety Data Sheet: Consult Safety Data Sheet before use.

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