

3M™ Flux Field Directional Material

3M™ Flux Field Directional Material (FFDM) EM25TP is a composite material consisting of a carrier resin, magnetic fillers and an optional acrylic pressure sensitive adhesive (PSA) and optional Black PET top film layer. This magnetic material is designed to interact and influence an Electro-Magnetic (EM) field. The EM field could be generated for various reasons and in many applications it is desired to focus the EM field across a specific volumetric area, such as a secondary EM field pick-up coil or antenna in a frequency range of below 5-10 MHz typically. The 3M FFDM EM25TP uses in the frequency range above the 5-10 MHz range is typically as an EMI EM field absorber as the higher loss (μ'') characteristics of the 3M FFDM EM25TP provide for excellent EM field reduction. 3M FFDM EM25TP is designed to efficiently couple to the EM field and redirect and focus the field as desired in a given application or to provide EM absorbing.

Key Features:

- Targeted permeability for < 5-10MHz FFDM performance for EM field coupling.
- Excellent EMI absorber performance for frequencies above 5-10 MHz.
- Excellent Absorbing performance from 100MHz to 4 GHz
- Multiple thickness options
- Black PET protection tape cover film (optional)
- Pressure sensitive acrylic adhesive (optional)
- Supplied on a removable liner for ease handling

TECHNICAL DATA SHEET | (EFFECTIVE 24FEB25)

Flux Field Directional Material

PHYSICAL PROPERTY	TYPE	UNIT	VALUE
Cover Film Type	Black Colored PET	μm	10
Magnetic Type	Soft Magnetic Composite	-	*View more detail on 3M website for magnetic type
Adhesive Type	Acrylic Adhesive	μm	10 - 30
Magnetic Layer Thickness		mm	*View more detail on 3M website for magnetic layer thickness
Total Thickness		-	Cover Film (Optional) + Magnetic Layer + Adhesive Layer (Optional)
Electrical Resistivity	ASTM D257	Ωm	2×10^4
Typical Permeability		-	250
Tempurature Range		$^{\circ}\text{C}$	-25 to 90
Thickness		mil	2, 4, 8