

# TG-FAM

## Flexible Absorbing Material

RoHS Compliant

### Features

- Effective EMI suppression in a wide frequency range
- Ultra thin, extremely flexible and easy to use
- Compatible with UL certified doubled-sided insulating tapes
- Antiresonance and de-coupling
- High surface impedance
- Easy to be cut into any shape

### Application:

Electronic components - 5G, Aerospace, AI, AIoT, AR/VR/MR/XR, Automotive, Consumer Devices, Datacom, Electric Vehicle, Electronic Products, Energy Storage, Industrial, Lighting Equipment, Medical, Military, Netcom, Panel, Power Electronics, Robot, Servers, Smart Home, Telecom, etc.

In addition to EMI-suppressions, FAM can handle the issue when RFID tags attached to metal (by recovering up to 80% of the reading distance from RFID reader). It is suitable for LF(125KHz) and HF(13.56MHz) bands. This helps to save the space from RFID antenna to metal. By this way can save the space from RFID to metal.

### Properties

Physical Properties	Unit	TG-FAM1	TG-FAM3	TG-FAM6	TG-FAM7
Frequency	GHz	0.001~18.0		0.001~9.0	0.001~3.0
Thickness	mm	0.12~2.50	0.25/0.50/0.75	0.05/0.1/0.2/0.3/0.5	0.08/0.12/0.22
Maximum Size	mm	400×400		210×297 (A4 Size)	130×130
Material	-	Magnetic Particles + Rubber			Sintering Iron-Core
Magnetic Inductivity ( $\mu'$ @1MHz)	-	25	50	170	140
Halogen	-	Halogen Contained		Halogen Free	
Operating Temperature	°C	-40~+85		-40~+155	-30~+120
Density	g/cm <sup>3</sup>	3.6	4.8	4.4	3.8
Surface Resistance	Ohm	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>5</sup>	10 <sup>9</sup>
Structure	-	<div> <div>FAM</div> <div>2-Sided Adhesive Tape</div> <div>Release Paper</div> </div> Adhesive Tape Options (No/Single-Side/Dual-Side)			<div> <div>PET Tape</div> <div>FAM</div> <div>2-Sided Adhesive Tape</div> <div>Release Paper</div> </div> Optional Dual-Side Adhesive Tapes

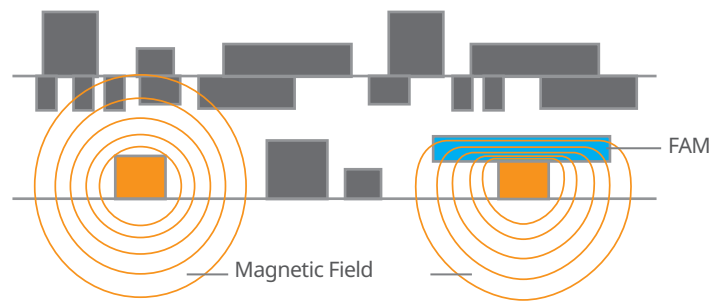
### T-Global USA LLC

2880 Zanker Road, Suite 103, San Jose, CA 95134, USA

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### Magnetic Shielding

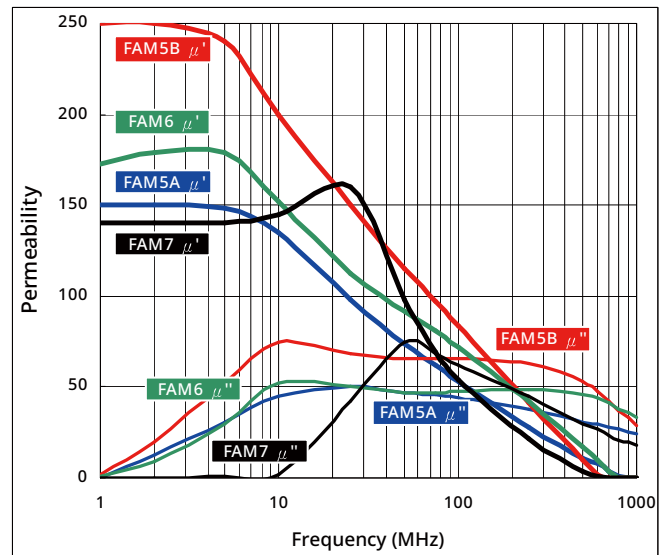
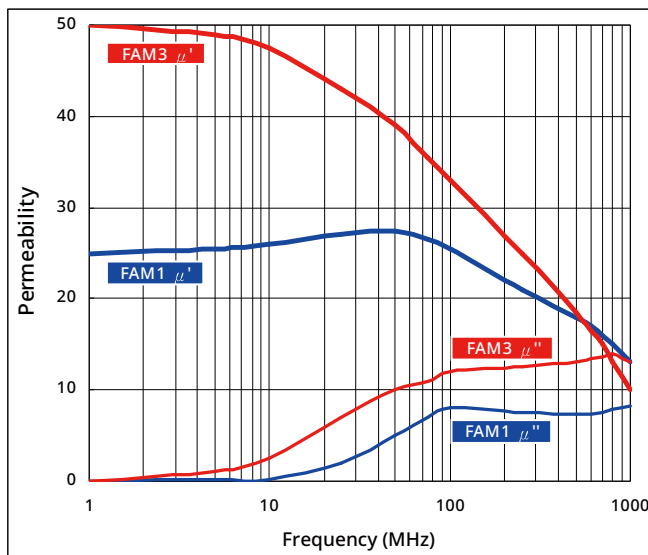


FAM can change the magnetic flux path to avoid the magnetic flux affect others components.

### Application for RFID NFC on metal



### Magnetic Inductivity ( $\mu = \mu' - j\mu''$ )



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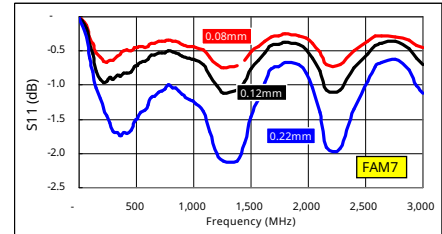
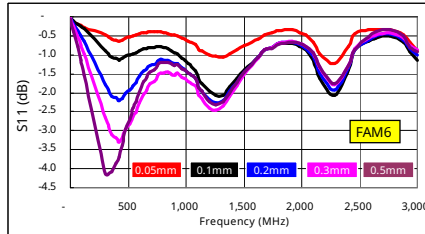
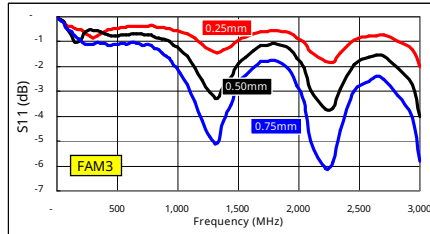
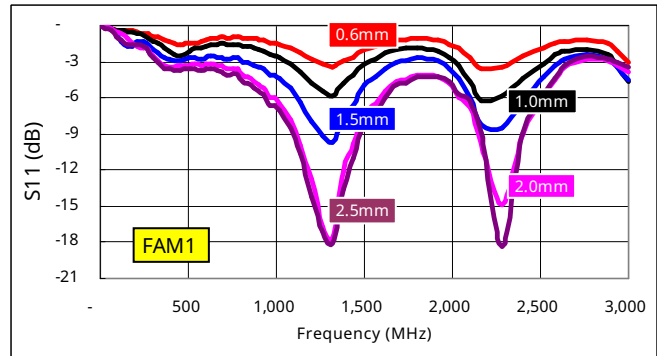
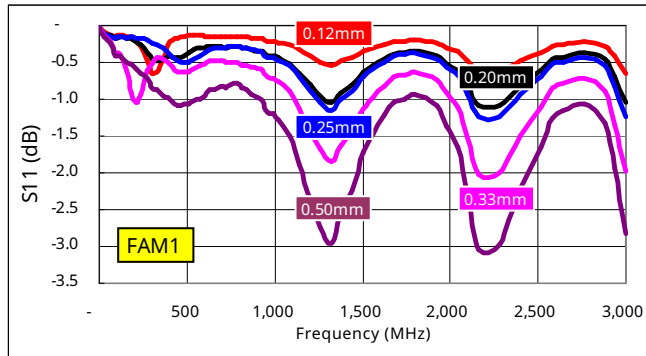
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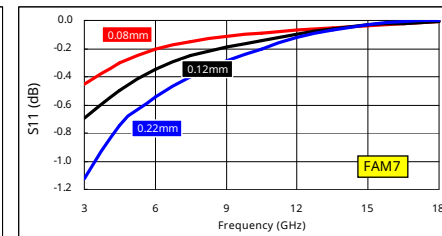
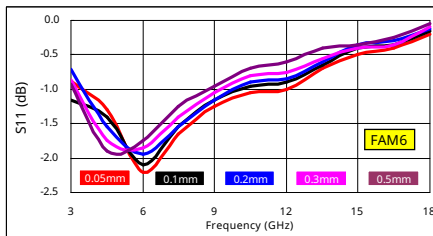
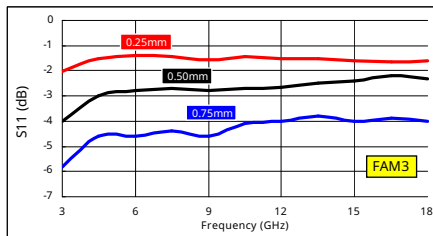
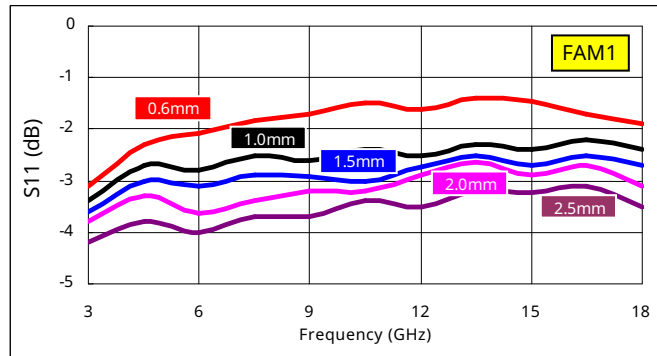
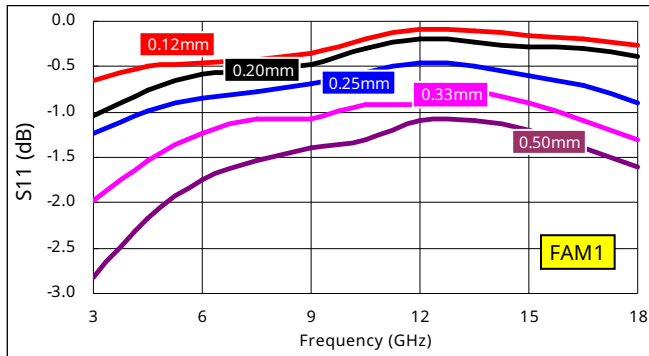


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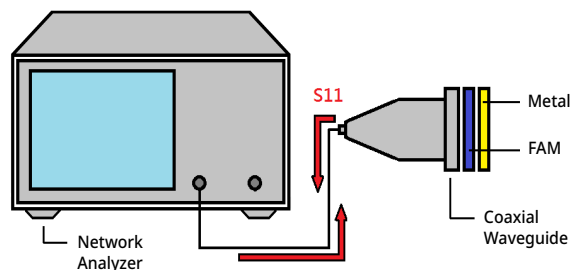
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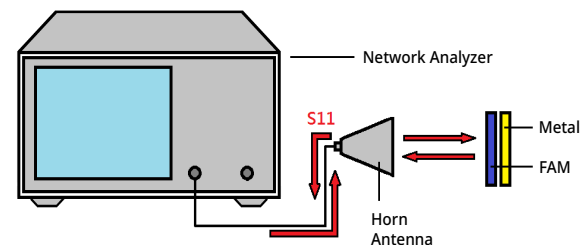
## Return Loss (3GHz~18GHz)



## (1MHz~3GHz)Testing Method



## (3GHz~18GHz)Testing Method



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T +1(669)345-0002

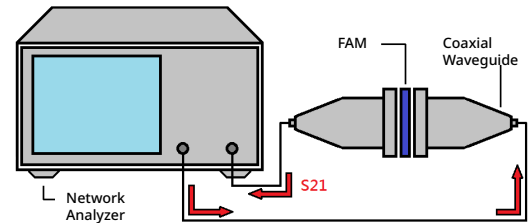
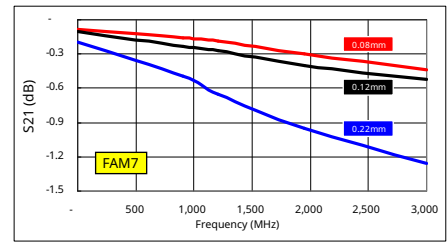
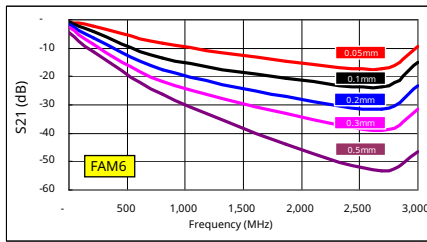
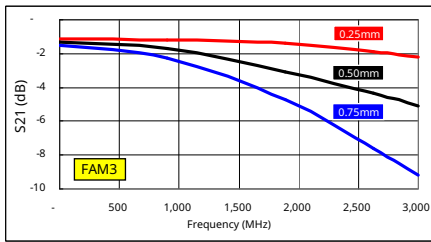
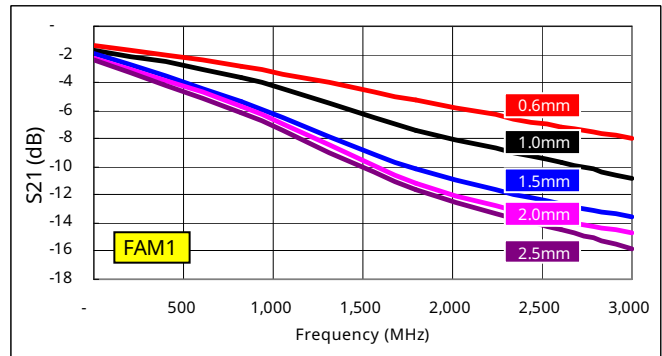
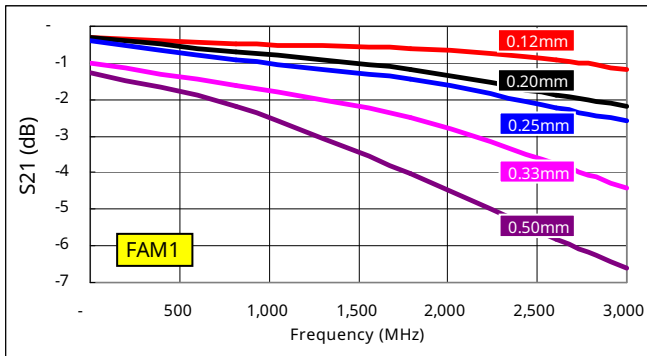
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## Insertion Loss



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