

# TG-FAM

## Flexible Absorbent Material

RoHS Compliant

### Features

- Effective EMI suppression in a wide frequency range
- Ultra thin and extremely flexible, can be freely arranged in space
- Non-conductive adhesive backing (UL) available
- Effective in preventing resonance and suppressing coupling
- High surface resistance
- Easy and fast to process
- Can be cut any shape easily

### Applications

Electronic components - Notebooks, PCs, workstations, LNBs for satellite systems, Mobile communications equipment, Base Stations for mobile phones, PHS, Peripheral devices for computers, Wireless equipment, Mobile Phones, High speed clocks, RFID, NFC, Wireless Charger, etc.

Besides the application of EMI, FAM can be a solution for RFID on metal also. It is suitable for LF (125KHz) and HF (13.56MHz) bands. It can deal with the malfunction problems when RFID Reader/Writer or RFID tag attached on metal (recover maximum 80% efficiency of the original distance). By this way you can save more space from RFID to metal.

### Properties

| Physical Properties                  | TG-FAM1   | TG-FAM3         | TG-FAM6              | TG-FAM7             | Unit                  |               |  |          |     |                       |               |   |
|--------------------------------------|---|-----------------|----------------------|---------------------|-----------------------|---------------|--|----------|-----|-----------------------|---------------|---|
| Frequency                            | 0.001~18.0  | 0.001~18.0      | 0.001~9.0            | 0.001~3.0           | GHz                   |               |  |          |     |                       |               |   |
| Thickness                            | 0.2~2.50  | 0.25/0.50       | 0.05/0.1/0.2/0.3/0.5 | 0.08/0.12/0.22      | mm                    |               |  |          |     |                       |               |   |
| Maximum Sizes                        | 600×400   |                 | 210×297 (A4 size)    | 130×130             | mm                    |               |  |          |     |                       |               |   |
| Material                             | Magnetic Particles+Rubber   |                 |                      | Sintering iron-core | -                     |               |  |          |     |                       |               |   |
| Magnetic Inductivity ( $\mu'$ @1MHz) | 25  | 50              | 170                  | 140                 | -                     |               |  |          |     |                       |               |   |
| Halogen                              | Halogen contained   |                 | Halogen free         | Halogen free        | -                     |               |  |          |     |                       |               |   |
| Working Temperature                  | -40~+85   |                 | -40~+155             | -30~+120            | °C                    |               |  |          |     |                       |               |   |
| Density                              | 3.6   | 4.8             | 4.4                  | 3.8                 | g/cm <sup>3</sup>     |               |  |          |     |                       |               |   |
| Surface Resistance                   | 10 <sup>6</sup>   | 10 <sup>6</sup> | 10 <sup>5</sup>      | 10 <sup>9</sup>     | Ohm                   |               |  |          |     |                       |               |   |
| Structure                            | <table border="1"> <tr><td>FAM</td></tr> <tr><td>2-sided adhesive tape</td></tr> <tr><td>Release paper</td></tr> </table> <p>Allow non/one/two sides adhesive</p> |                 |                      | FAM                 | 2-sided adhesive tape | Release paper | <table border="1"> <tr><td>PET Tape</td></tr> <tr><td>FAM</td></tr> <tr><td>2-sided adhesive tape</td></tr> <tr><td>Release paper</td></tr> </table> <p>Allow one side PET / one side adhesive tape or two sides adhesive tape</p> | PET Tape | FAM | 2-sided adhesive tape | Release paper | - |
| FAM                                  |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| 2-sided adhesive tape                |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| Release paper                        |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| PET Tape                             |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| FAM                                  |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| 2-sided adhesive tape                |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |
| Release paper                        |   |                 |                      |                     |                       |               |  |          |     |                       |               |   |

### T-Global Technology (Europe & North America) Limited

Units 1-2 Cosford Business Park, Central Park, Lutterworth, Leicestershire, LE17 4QU, United Kingdom  
**T** +44 (0)1455 553 510    **E** sales@tglobaltechnology.com    **W** www.tglobaltechnology.com

Version 17  
20200908

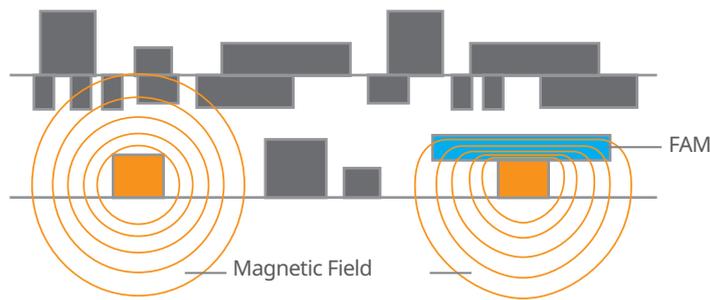


T-Global Technology are proud to announce the launch of a new company logo and mission statement as part of the ongoing growth and evolution of our company's brand.

**NOTICE:** The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. All specifications are subject to change without notice. The protective film does not affect the function of the product. If there is no special requirement, the default depends on T-Global. Since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part and users should make their own test to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated in T-Global Technology's invoice, quotation, or order acknowledgment.

We disclaim any and all liabilities incurred in connection with the use of information contained herein, or otherwise. All risks of such are assumed by the user. Furthermore, nothing contained herein shall be construed as a recommendation to use any process or to manufacture or to use any product in conflict with existing or future patents covering any product or material or its use.

### Magnetic Shielding

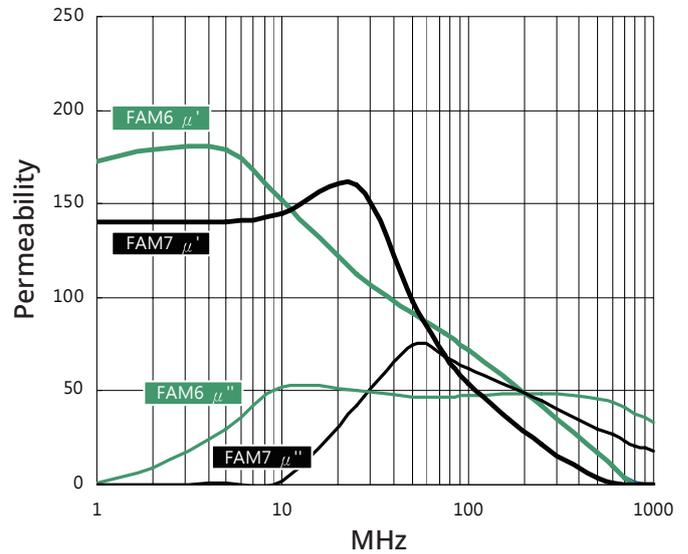
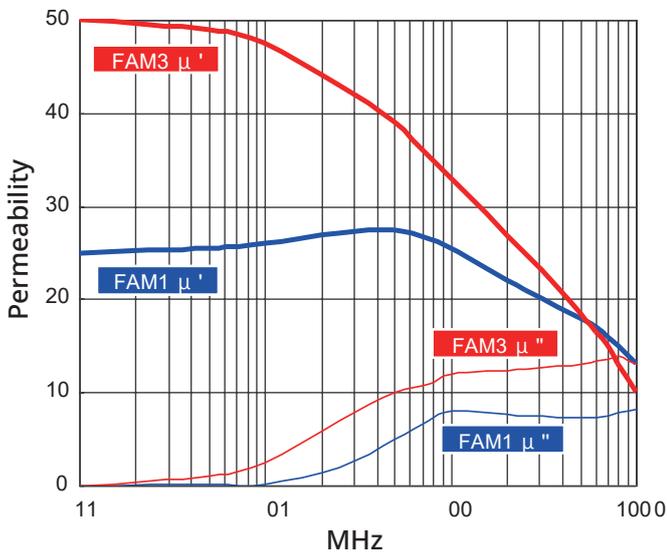


FAM can change the magnetic flux path to avoid the magnetic flux affect others components.

### Application for RFID NFC on metal

|  |  |   |
|--|--|---|
| <br> | <br> | <br> |
| RFID tag only<br>(100% original distance)  | RFID tag + metal<br>(5% max original distance)   | RFID tag + FAM + metal<br>(80% max original distance)   |

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



### T-Global Technology (Europe & North America) Limited

Units 1-2 Cosford Business Park, Central Park, Lutterworth, Leicestershire, LE17 4QU, United Kingdom  
 T +44 (0)1455 553 510 E sales@tglobaltechnology.com W www.tglobaltechnology.com

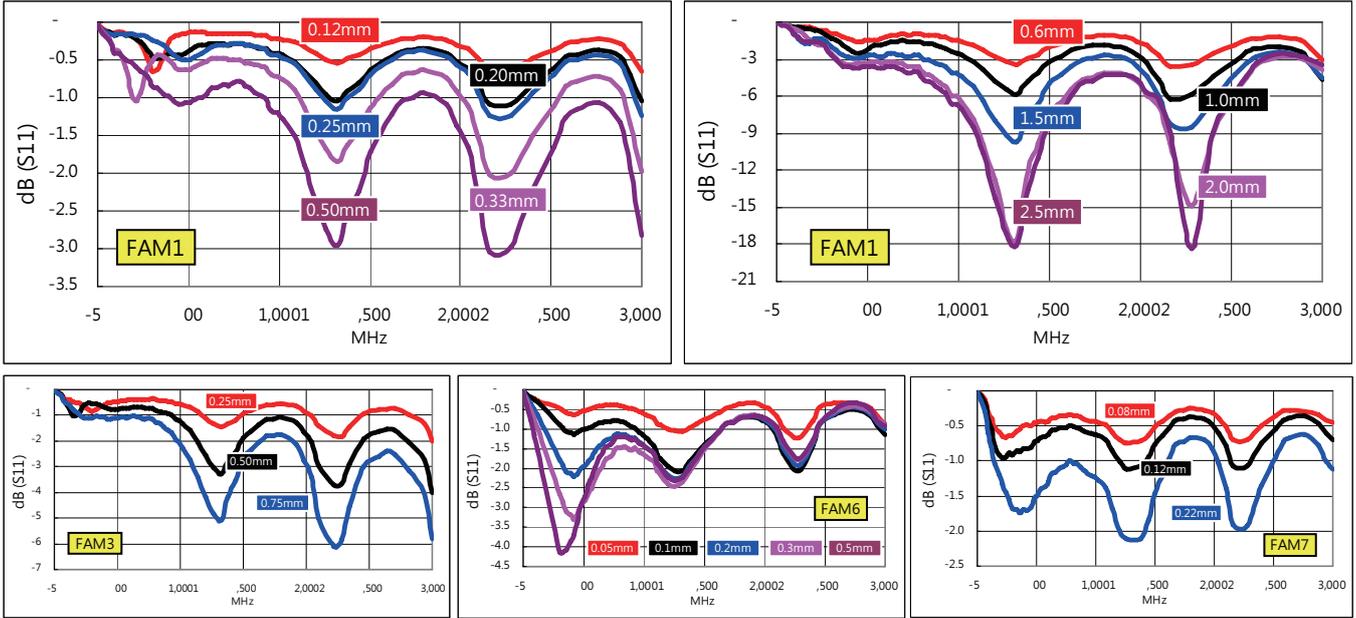
Version 17  
20200908



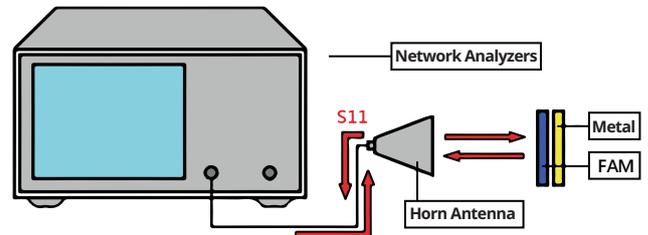
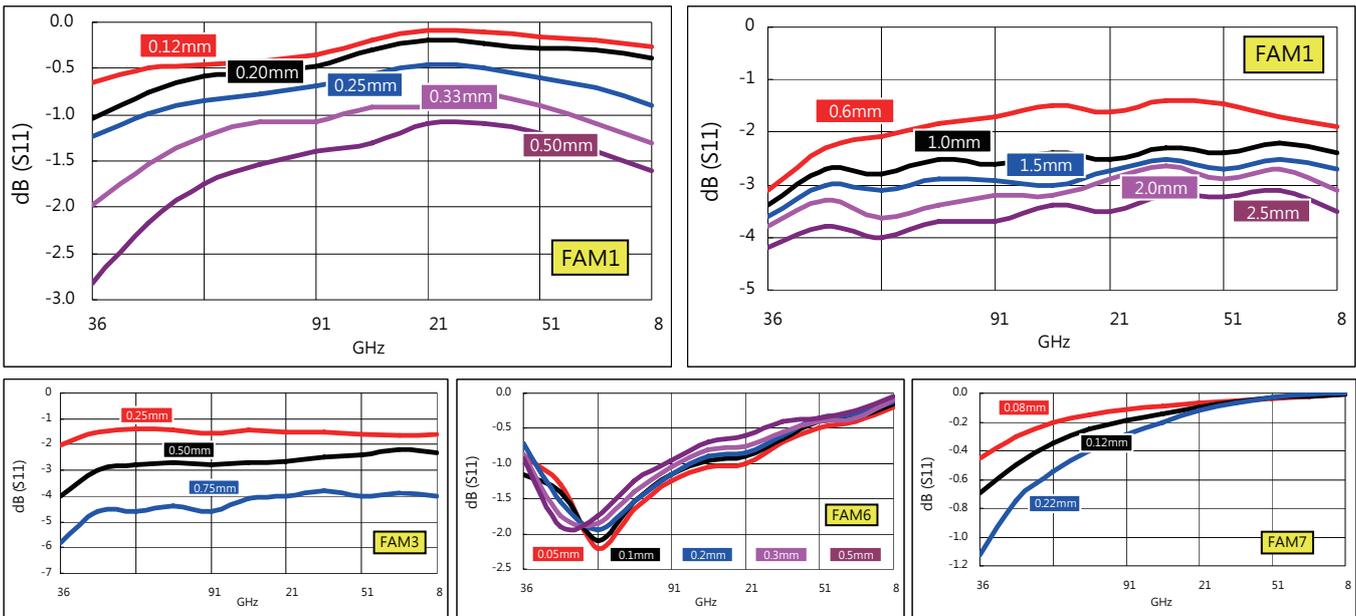
T-Global Technology are proud to announce the launch of a new company logo and mission statement as part of the ongoing growth and evolution of our company's brand.

**NOTICE:** The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. All specifications are subject to change without notice. The protective film does not affect the function of the product. If there is no special requirement, the default depends on T-Global. Since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part and users should make their own test to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated in T-Global Technology's invoice, quotation, or order acknowledgment. We disclaim any and all liabilities incurred in connection with the use of information contained herein, or otherwise. All risks of such are assumed by the user. Furthermore, nothing contained herein shall be construed as a recommendation to use any process or to manufacture or to use any product in conflict with existing or future patents covering any product or material or its use.

Return Loss (1MHz~3GHz)



Return Loss (3MHz~18GHz)



T-Global Technology (Europe & North America) Limited

Units 1-2 Cosford Business Park, Central Park, Lutterworth, Leicestershire, LE17 4QU, United Kingdom  
 T +44 (0)1455 553 510 E sales@tglobaltechnology.com W www.tglobaltechnology.com

Version 17  
20200908



T-Global Technology are proud to announce the launch of a new company logo and mission statement as part of the ongoing growth and evolution of our company's brand.

**NOTICE:** The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. All specifications are subject to change without notice. The protective film does not affect the function of the product. If there is no special requirement, the default depends on T-Global. Since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part and users should make their own test to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated in T-Global Technology's invoice, quotation, or order acknowledgment. We disclaim any and all liabilities incurred in connection with the use of information contained herein, or otherwise. All risks of such are assumed by the user. Furthermore, nothing contained herein shall be construed as a recommendation to use any process or to manufacture or to use any product in conflict with existing or future patents covering any product or material or its use.