



Nov. 2018
TDK Corporation

P/N: **MAGNETIC SHEET SAMPLE KIT**

■ Sample list

"Magnetic Sheet Sample Kit" includes the following:

No.	Series	Magnetic Material Thickness (mm)	Series Product Name	Sample Size (mm)	Qty
1	IFL10M	0.025	IFL10M-025NB	140X95	1
2		0.050	IFL10M-050NB	140X95	1
3		0.100	IFL10M-100NB	140X95	1
4		0.200	IFL10M-200ND	140X95	1
5	IFL12	0.050	IFL12-050NB	140X95	1
6		0.100	IFL12-100NB	140X95	1
7		0.200	IFL12-200ND	140X95	1
8	IFL16	0.030	IFL16-030NB	140X95	1
9			IFL16-030EB	140X95	1
10			IFL16-030GB	140X95	1
11		0.050	IFL16-050NB	140X95	1
12		0.100	IFL16-100NB	140X95	1
13	IFM10M	0.025	IFM10M-025BB	140X95	1
14	IFF08	0.050	IFF08-050ND	140X95	1
15		0.100	IFF08-100ND	140X95	1
16	IFL04	0.050	IFL04-050NB	140X95	1
17		0.100	IFL04-100NB	140X95	1
18		0.200	IFL04-200ND	140X95	1

All specifications are subject to change without notice.

TDK Technology - Proprietary and Confidential Information of TDK Group Companies



Noise suppression sheet
- Flexield -

Series name

IFL(normal)

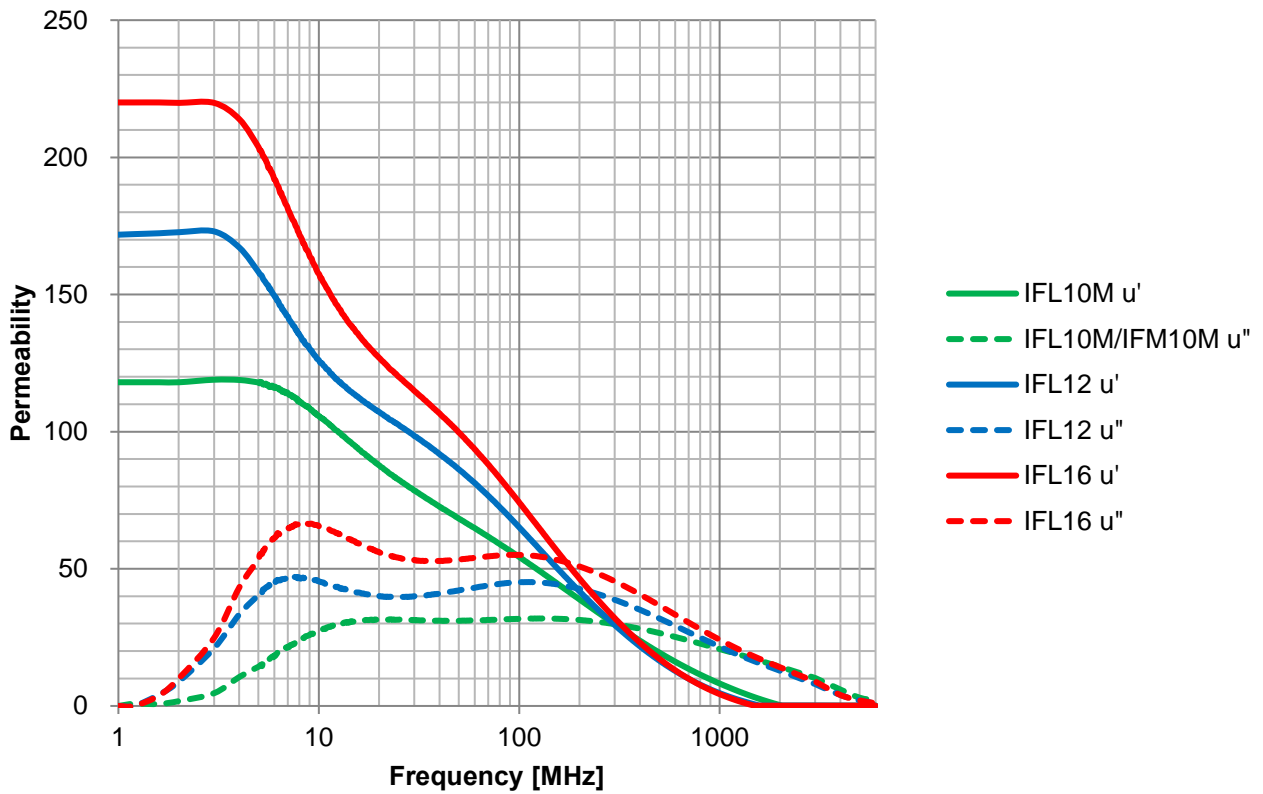
IFM(with copper)

IFF(Heat-resistant)

Material characteristic(Relative permeability)

Material name	Recommended specification frequency range	Relative permeability (at 1MHz)	Surface resistivity (Ω /sq.)min	Thermal conductivity (W/m·K)	Operating temperature range ($^{\circ}$ C)
IFL10M	10MHz to 3GHz	120	1M	1.5	-40 to +85
IFL12	5MHz to 3GHz	180	10k	1.5	-40 to +85
IFL16	0.5MHz to 1GHz	220	10k	1.5	-40 to +85
IFF08	10MHz to 3GHz	100	1M	1.5	-40 to +125
IFM10M	0.5MHz to 10GHz	120	1M	1.5	-40 to +85

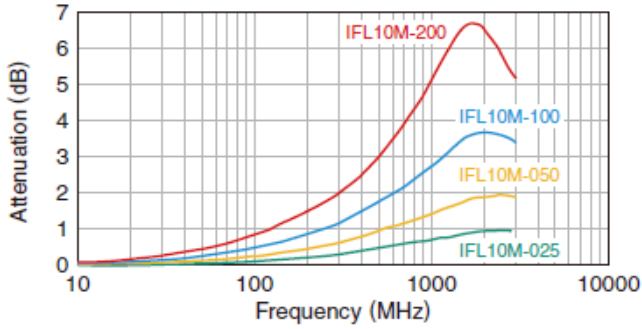
Frequency vs. Permeability



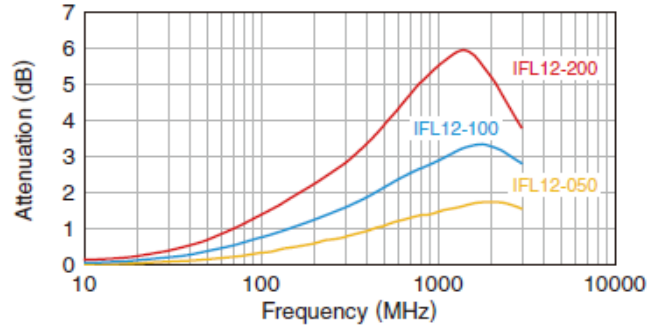
Material characteristic(Transmission attenuation)

TRANSMISSION ATTENUATION

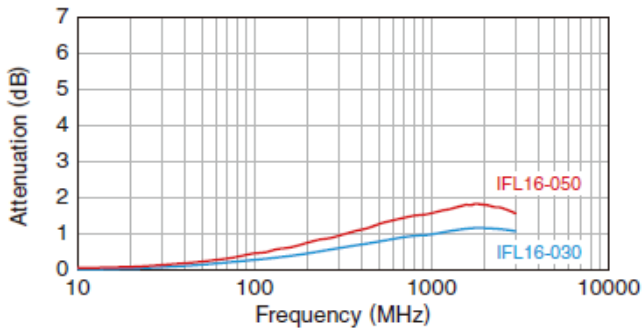
IFL10M



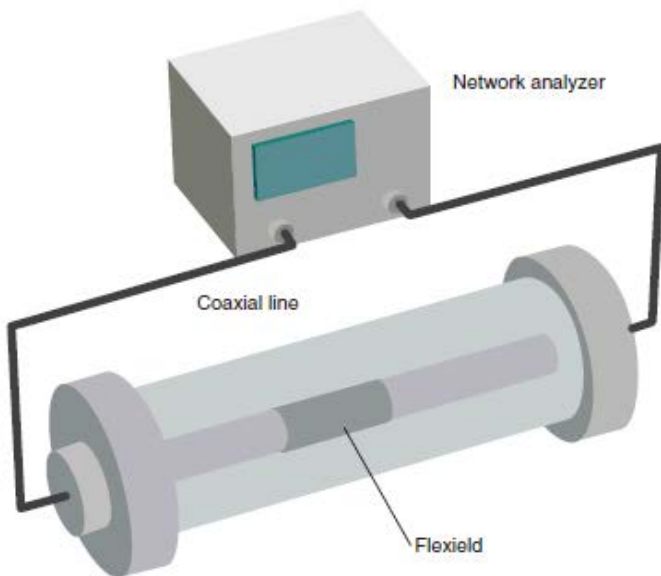
IFL12



IFL16



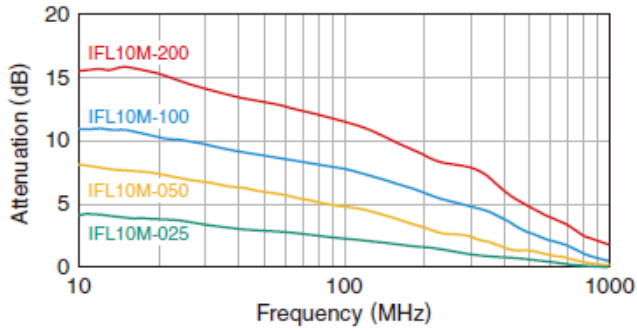
TRANSMISSION ATTENUATION TESTING METHOD (Transmission measurement in a coaxial track)



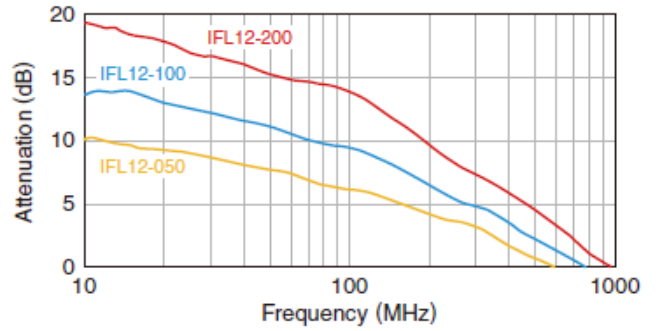
Material characteristic(Transmission attenuation)

NEIGHBORHOOD MAGNETIC FIELD ATTENUATION

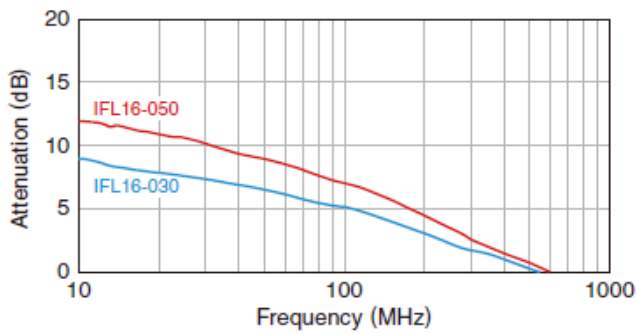
IFL10M



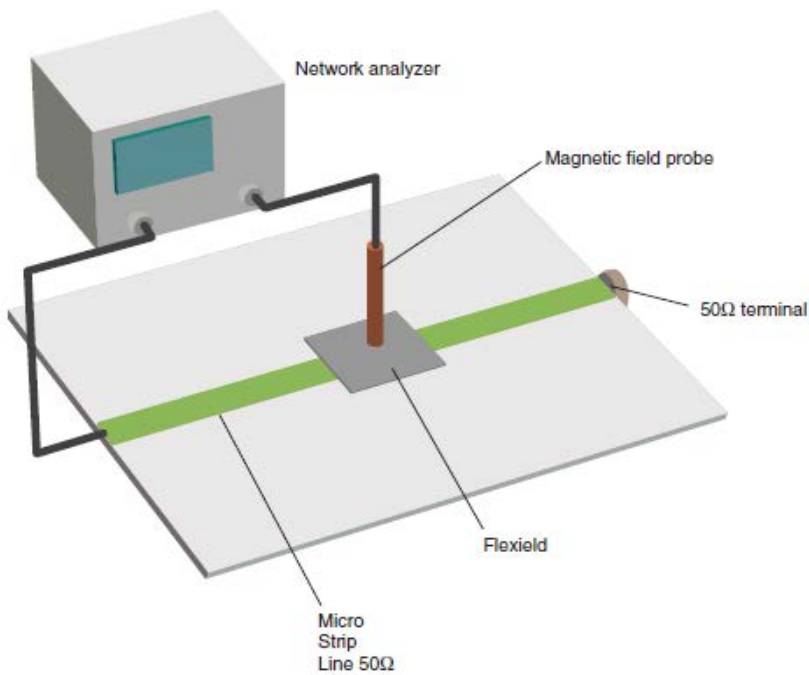
IFL12



IFL16



NEIGHBORHOOD MAGNETIC FIELD ATTENUATION TESTING METHOD (Magnetic field measurement on the microstrip line)





Magnetic Sheets for NFC & RFID
- Flexield -

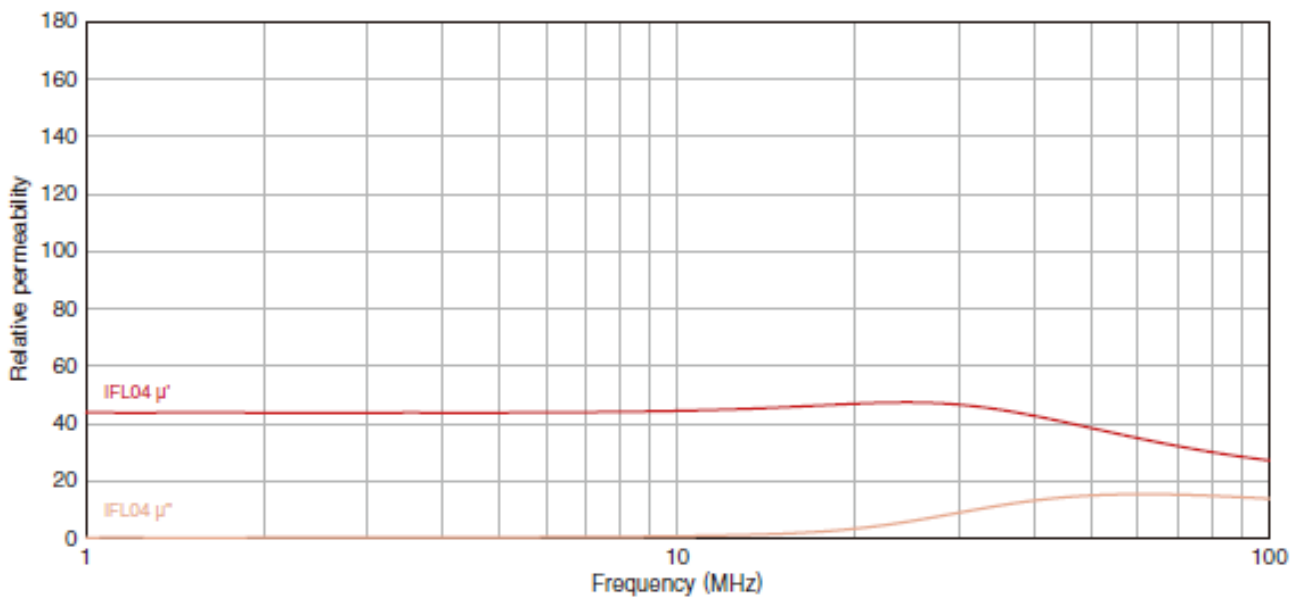
Series name

IFL04 series

Material characteristic(Relative permeability)

Material name	Relative permeability (at 13.56MHz) typ.	Surface resistivity (Ω /sq.)min	Thermal conductivity (W/m·K)	Operating temperature range ($^{\circ}$ C)
IFL04	$\mu'/\mu''=45/1.3$	10k	1.5	-40 to +85

RELATIVE PERMEABILITY



REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

When mounting on live electrical parts directly, there is a fear that an insulation accident is caused, so please consider on the design in case of use.

There is a fear that sullenness of double sided adhesive tape occurs, so please refrain from the use to a part where you wind repeatedly by which it's for the hinge part.

The products listed on this specification sheet are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property. When the damage occurs by having been used the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please understand that the responsibility cannot be taken.

1. Aerospace/Aviation equipment
2. Transportation equipment (cars, electric trains, ships, etc.)
3. Medical equipment
4. Power-generation control equipment
5. Atomic energy-related equipment
6. Seabed equipment
7. Transportation control equipment
8. Public information-processing equipment
9. Military equipment
10. Electric heating apparatus, burning equipment
11. Disaster prevention/crime prevention equipment
12. Safety equipment
13. Other applications that are not considered general-purpose applications

When using these products in general purposes and standard use, it is recommended that protection circuits are used, devices are secured, and backup circuits are kept for increased safety.