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TDK Corporation

Magnetic Sheets for RFID
- Flexield -

Series name

IFQ06S (Heat-resistant type)

All specifications are subject to change without notice.
Before using these products, be sure to request the delivery specifications.

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IFQ06S

FEATURES

- High permeability(μ') and low magnetic loss(μ") materials up to 13.56MHz
- High flexibility which allows sheets to easily be formed to desired shape
- Supports high temperatures of 125 degree C
- High quality factor (Q)
- Protect system from metal objects located directly behind coils
- Available on a roll or in sheet form

TEMPERATURE RANGE

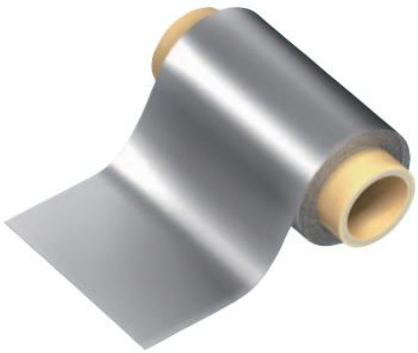
Operating temperature
–40 to +125 °C

STANDARD SHAPE LIST

Material name	Magnetic layer thickness (mm)	Sheet dimensions (mm)	Roll dimensions Width (mm)	Roll dimensions Length (m)
IFQ06S	0.050	300 X 200	300	100
	0.100		300	100
	0.200		Non-STD*	Non-STD*

*Please contact us for details

- Please contact us for specifications other than standard attributes.



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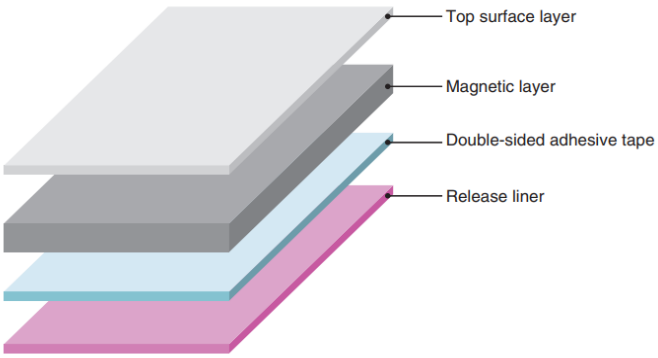
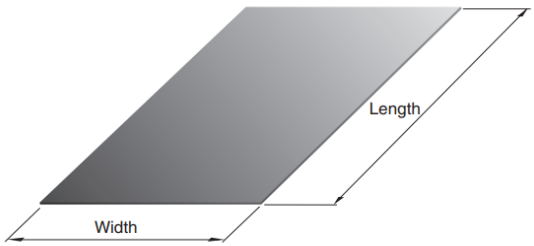
IFQ06S Sheet Type

PART NUMBER CONSTRUCTION

IFQ	06S	-	050	N	D	300	X	200
Series name	Material symbol		Magnetic layer thickness (mm)	Top surface layer thickness (mm)	Double-sided adhesive tape thickness (mm)	Length (mm)		Width (mm)

Series name	Material symbol	Magnetic layer thickness (mm)		Top surface layer thickness (mm)		Double-sided adhesive tape thickness (mm)		Length (mm)		Width (mm)	
IFQ	06S	050	0.050	N	No	N	No	300	300	200	200
		100	0.100	R	0.038	D	0.030				
		200	0.200	R : Release type							





STANDARD PART NUMBER LIST

(Typical)

Material name	Part number	Sheet dimensions (mm)	Magnetic layer thickness (mm)	Total thickness (mm)
IFQ06S	IFQ06S-050ND300X200	300x200	0.050	0.080
	IFQ06S-100ND300X200		0.100	0.130
	IFQ06S-200ND300X200		0.200	0.240

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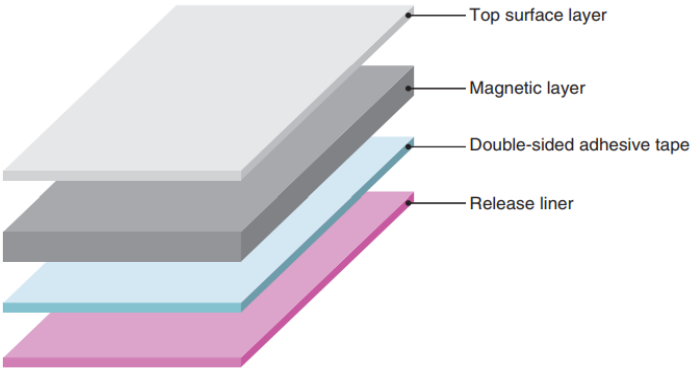
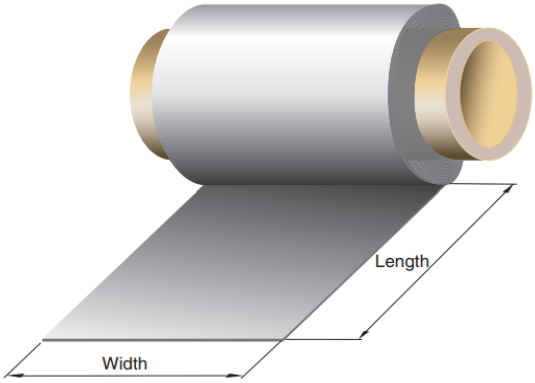
IFQ06S Roll Type

■ PART NUMBER CONSTRUCTION

IFQ	06S	-	050	N	D	1HR	X	300
Series name	Material symbol		Magnetic layer thickness (mm)	Top surface layer thickness (mm)	Double-sided adhesive tape thickness (mm)	Length (m)		Width (mm)
IFL	06S		050 / 0.050 100 / 0.100	N / No R / 0.038	N / No D / 0.030	50R / 50 1HR / 100		300 / 300

R : Release type





■ STANDARD PART NUMBER LIST

(Typical)

Material name	Part number	Roll dimensions Width (mm)	Roll dimensions Length (m)	Magnetic layer thickness (mm)	Total thickness (mm)
IFQ06S	IFQ06S-050RN1HRX300	300	100	0.050	0.088*
	IFQ06S-100RN1HRX300			0.100	0.138*
	IFQ06S-050ND1HRX300			0.050	0.080
	IFQ06S-100ND50RX300		50	0.100	0.130

* Note : Including top surface layer

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IFQ06S

■ MATERIAL CHARACTERISTIC

☐ Material Characteristic Table

(Typical)

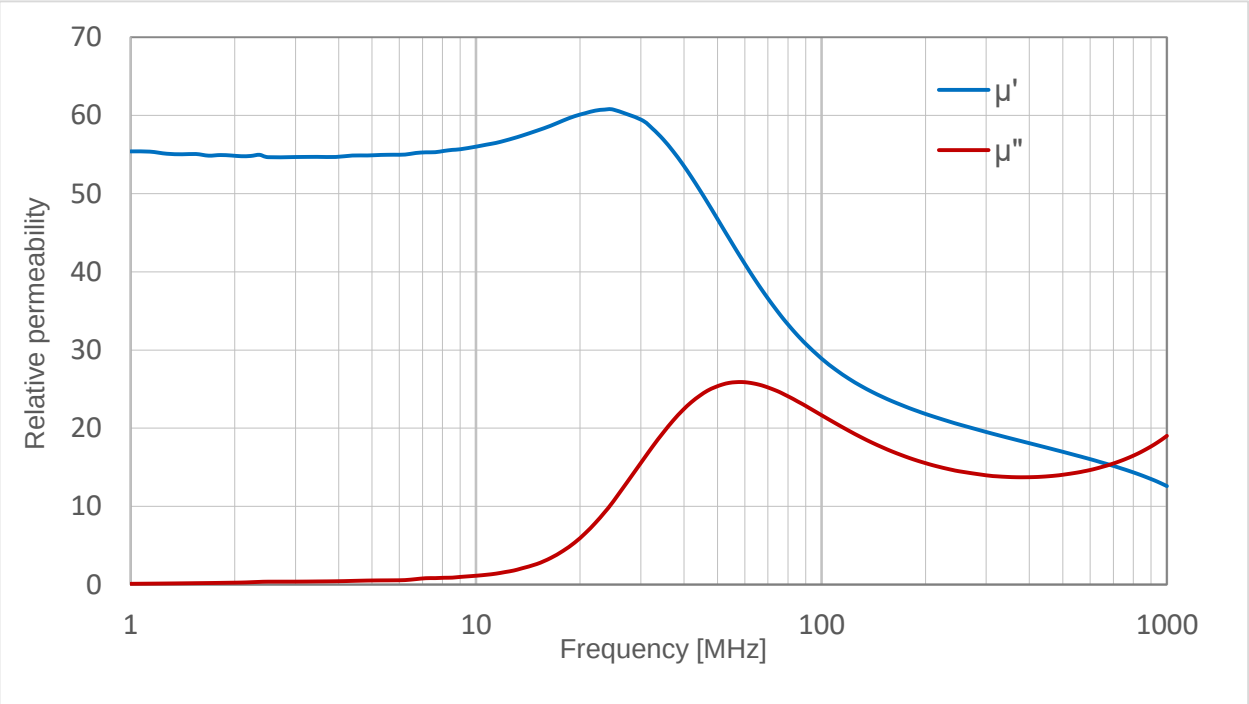
Material name	Relative permeability (at 13.56MHz)			Surface resistivity (ohm/sq.)
	u'	u"	u'/u"	
IFQ06S	56	2	28	10M

(Typical)

Material name	Thermal conductivity (W/m･K)	Saturated magnetic flux density (mT)	Curie temperature (deg.C)	Relative Permittivity (at 1MHz)
IFQ06S	1.5	150	> 500	1500

☐ Relative Permeability

Frequency vs 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

The products listed on this catalog 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.
If you intend to use 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 contact us.

1. Aerospace/aviation equipment
2. Transportation equipment (electric trains, ships, etc.)
3. Medical equipment (excepting Pharmaceutical Affairs Law classification Class1,2)
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 designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.