



May. 2023 Ver.5.0 TDK Corporation

# Magnetic Sheets for RFID - Flexield -

Series name



#### MAGNETIC SHEET

**⊗TD** 

May. 2023 Ver.5.0 **TDK** Corporation

#### **IFQ06**



- High permeability( $\mu$ ') and low magnetic loss( $\mu$ ") materials up to 13.56MHz
- · High flexibility which allows sheets to easily be formed to desired shape
- High quality factor (Q)
- · Protect system from metal objects located directly behind coils
- · Available on a roll or in sheet form

#### **TEMPERATURE RANGE**

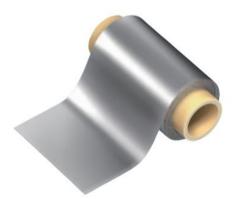
Operating temperature -40 to +85 °C

## STANDARD SHAPE LIST

Material	Magnetic layer	Sheet	Roll dimensions	
name	thickness (mm)	dimensions (mm)	Width (mm)	Length (m)
	0.050		300	100
IFQ06	0.100	300 X 200	300	100
	0.200		Non-STD*	Non-STD*

\*Please contact us for details

· Please contact us for specifications other than standard attributes.

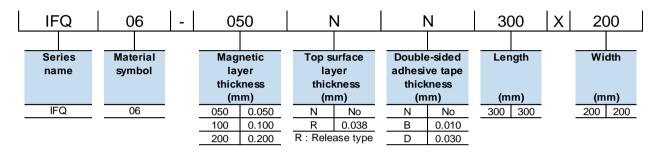


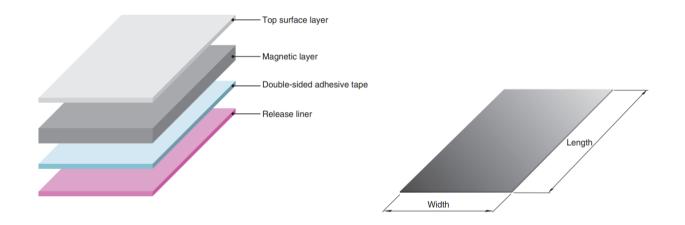


May. 2023 Ver.5.0 TDK Corporation

#### IFQ06 Sheet Type

## PART NUMBER CONSTRUCTION





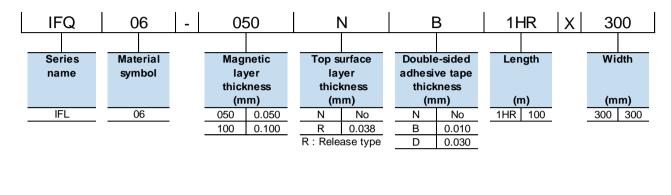
## STANDARD PART NUMBER LIST

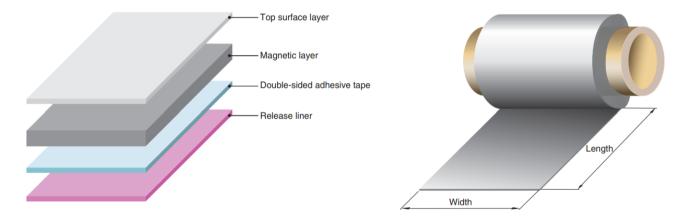
				(Typical)
Material	Part number	Sheet	Magnetic layer	Total
name		dimensions	thickness	thickness
		(mm)	(mm)	(mm)
	IFQ06-050NB300X200		0.050	0.060
IFQ06	IFQ06-100NB300X200	300x200	0.100	0.110
	IFQ06-200ND300X200		0.200	0.240

May. 2023 Ver.5.0 TDK Corporation

#### IFQ06 Roll Type

## PART NUMBER CONSTRUCTION





## STANDARD PART NUMBER LIST

Material	Part number	Roll dimensions		Magnetic layer	(Typical) Total
name		Width (mm)	Length (m)	thickness (mm)	thickness (mm)
IFQ06	IFQ06-050RN1HRX300	300	100	0.050	0.088*
	IFQ06-100RN1HRX300			0.100	0.138*
	IFQ06-050NB1HRX300			0.050	0.060
	IFQ06-100NB1HRX300			0.100	0.110

\* Note : Including top surface layer

#### MAGNETIC SHEET

May. 2023 Ver.5.0 TDK Corporation

**公TDK** 

#### **IFQ06**

## MATERIAL CHARACTERISTIC

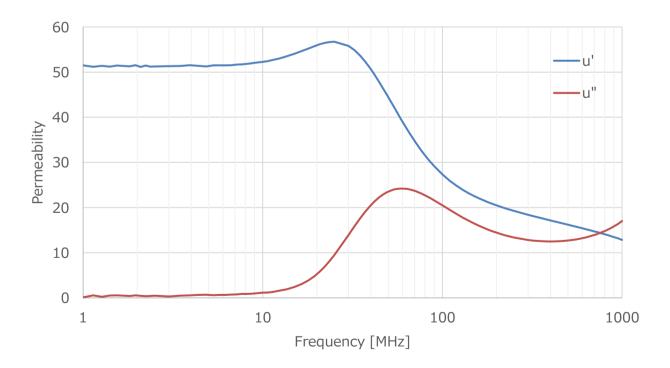
#### □ Material Characteristic Table

				(Typical)
Material	Relative permeability			Surface
name	( at 13.56MHz )			resistivity
	u'	u"	u'/u"	(ohm/sq.)
IFQ06	56	2	28	10M

				(Typical)
Material	Thermal	Saturated magnetic	Curie	Relative
name	conductivity	flux density	temperature	Permittivity
	(W/m·K)	(mT)	(deg.C)	(at 1MHz)
IFQ06	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 (cars, 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.