



Magnetic Sheets for RFID  
- Flexield -

Series name

**IBQ15**

## IBQ15

### FEATURES

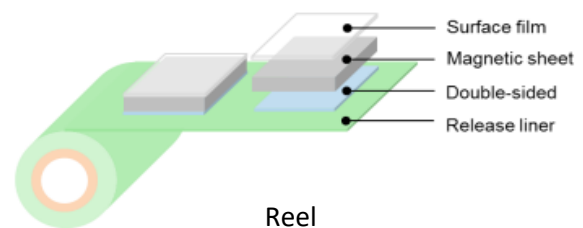
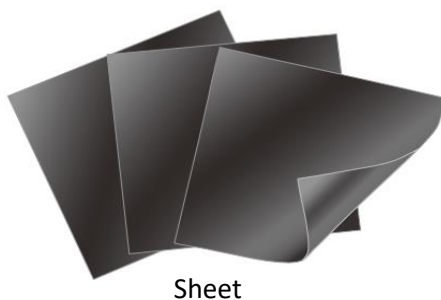
- High permeability ( $\mu'$ ) and low magnetic loss ( $\mu''$ ) material for up to 13.56MHz applications
- It's also possible to load on a little gap because it's thin type.
- Has flexibility, it does not crack by impact or the like
- Protects system from metal objects located directly behind coils
- Offer by a reel type is possible

### TEMPERATURE RANGE

<b>Operating temperature</b>
-40 to +85 °C

### STANDARD SHAPE LIST

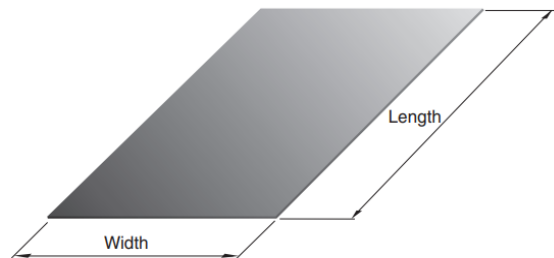
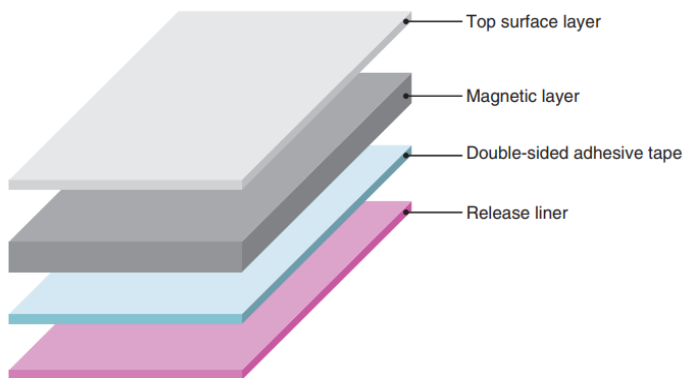
Material name	Magnetic layer thickness (mm)	Sheet dimensions (mm)	Reel type dimensions (mm)
IBQ15	0.045	-	50x50
	0.100	125 X 125	50x50
	0.180	125 X 125	-
	0.200	-	50x50



## IBQ15 Sheet Type

### PART NUMBER CONSTRUCTION

IBQ	15	-	100	D	D	125	125
Series name	Material symbol		Magnetic layer thickness (mm)	Top surface layer thickness (mm)	Double-sided adhesive tape thickness (mm)	Length (mm)	Width (mm)
IBQ	15		100   0.100 180   0.180	B   0.01 D   0.03	B   0.01 D   0.03	125   125	125   125



### STANDARD PART NUMBER LIST

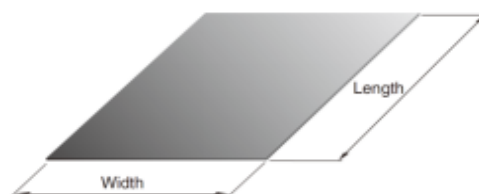
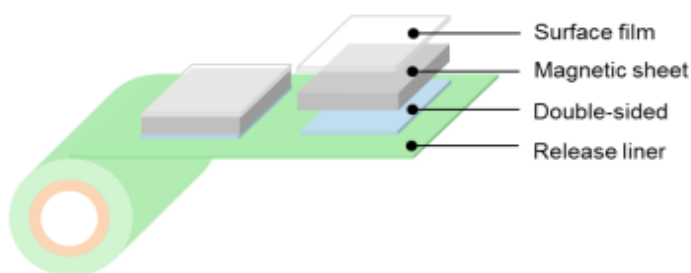
Material name	Part number	Sheet dimensions (mm)	Magnetic layer thickness (mm)	Total thickness (mm)
IBQ15	IBQ15-100BB125X125	125x125	0.100	0.120
	IBQ15-180DD125X125		0.180	0.240

(Typical)

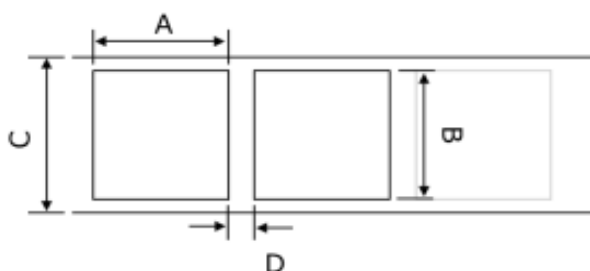
## IBQ15 Reel Type

### PART NUMBER CONSTRUCTION

IBQ	15	-	100	D	D	R	50	X	50	
Series name	Material symbol		Magnetic layer thickness (mm)	Top surface layer thickness (mm)		Double-sided adhesive tape thickness (mm)		Type	Length (mm)	Width (mm)
IBQ	15		045   0.045	B   0.01	B   0.01	R   Reel	50   50		50   50	
			100   0.100	C   0.02	C   0.02					
			200   0.200	D   0.03	D   0.03					



### SHAPE & DIMENSIONS



- Size (Tolerance)
- A & B : Maximum 60mm  
( <math>< 50\text{mm}</math>:  $\pm 0.3\text{mm}$ ,  $50 \leq A \leq 60$ :  $\pm 0.5\text{mm}$  )
- C : Maximum 80mm ( $\pm 0.5\text{mm}$ )
- D : Minimum 3 mm ( $\pm 0.5\text{mm}$ )

### STANDARD PART NUMBER LIST

Material name	Part number	Standard dimensions (mm)	Magnetic layer thickness (mm)	Package Quantity (pcs/reel)
IBQ15	IBQ15-045BBR50X50	50x50	0.045	1000
	IBQ15-100BBR50X50		0.100	1000
	IBQ15-200CCR50X50		0.200	1000

# IBQ15

## MATERIAL CHARACTERISTICS

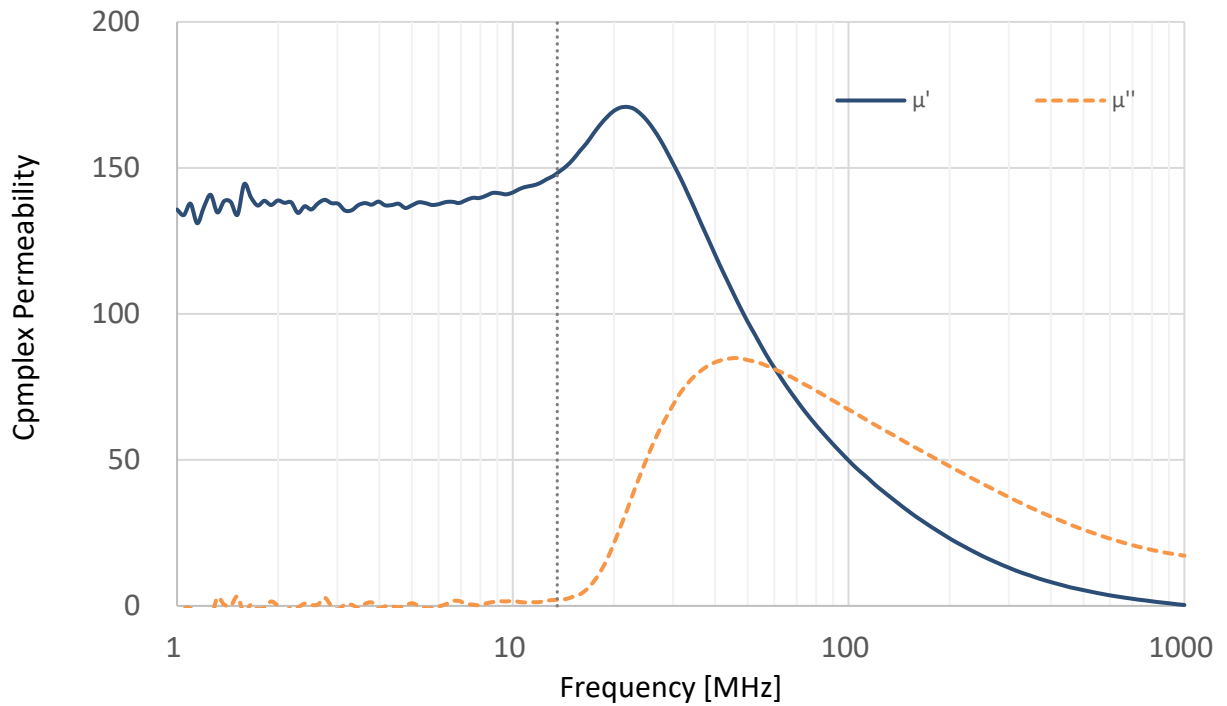
Material Characteristic Table

(Typical)

Material name	Relative permeability			Surface resistivity (ohm/sq.)
	( at 13.56MHz )			
	$\mu'$	$\mu''$	$\mu'/\mu''$	
IBQ15	150	3	50	1G

Relative Permeability

Permeability ( $\mu'$  and  $\mu''$ ) vs. Frequency



## 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.