

# Noise Suppression Sheets

## Flexield

For multipurpose

IRJ/IFL series

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- All specifications are subject to change without notice.
  - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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# Noise Suppression Sheets/Magnetic Sheets/ Radio Wave Absorbers Flexield

Conformity to RoHS Directive

## FOR NOISE SUPPRESSION IRJ AND IFL MATERIALS

TDK's Flexield is a highly flexible and shock resistant soft magnetic sheet material consisting of magnetic material and resin. It suppresses noise radiated from electronic devices across a wide frequency range. Offering excellent flexibility in fabrication, Flexield is a sheet-type noise reduction solution particularly suited for high-frequency range.



### FEATURES

- They are flexible(not crack).
- They are suited for thin and compact devices.
- Available in a wide range of dimensions and shapes.
- Conforming to RoHS Directive.

### APPLICATIONS

- Noise reduction for flexible cables used in mobile devices (including notebook PC's, digital cameras, game machines, and cellular phones).
- Reduction of noise radiated from a wide variety of electronic devices (including noise from CPU).
- Reduction of specific absorbed radiation (SAR) from cellular phones.
- Reduction of internal EMI (resonance, crosstalk) inside a shielded casing.

### PRODUCT IDENTIFICATIONS

IRJ17	AB	H	20	x	10	x	0.25
(1)	(2)	(3)	(4)		(5)		(6)

(1) Material name

(2) Double-sided tape symbol

No symbol: no double-sided tape used

A: double-sided tape (t=0.17)

AB: double-sided tape (t=0.03)

AT: double-sided tape (t=0.01)

(3) Product process symbol

(4) Length(20: 20mm)

(5) Width(10: 10mm)

(6) Thickness(0.25: 0.25mm)

### SPECIFICATIONS

#### FOR MULTIPURPOSE

Type (Features/Application)	Flame retardant High $\mu$ /High characteristic					Flame retardant High $\mu$ /Broad frequency band					Flame retardant High frequency band			Thin type Halogen-free	
Material name	IRJ17					IRJ09					IRJ04			IFL10M	
Recommended frequency range	5MHz to 3GHz					10MHz to 3GHz					50MHz to 10GHz			10MHz to 3GHz	
Operating temperature range (°C)	-40 to +85					-40 to +85					-40 to +85			-40 to +85	
Initial permeability[at 1MHz]typ.	180					100					40			120	
Resistivity ( $\Omega$ /square) min.	1M					1M					1M			1M	
Thermal conductivity(W/m • K)	1.7					1.7					1.5			1.5	
Standard sheet dimensions (mm)	300×200					300×200					300×200			300×200	
Standard sheet thickness (mm)	0.1	0.2	0.3	0.4	0.5	0.1	0.2	0.3	0.4	0.5	0.1	0.25	0.5	0.05	0.1
Standard sheet weight (g)	21	42	63	84	105	21	42	63	84	105	22	54	108	10	19
Standard double-sided tape thickness(Adhesive layer) (mm)	0.01	0.03	0.03	0.03	0.03	0.01	0.03	0.03	0.03	0.03	0.01	0.03	0.03	0.01	0.01
Compatible with rolls	—					—					—			✓	
Density (g/cm <sup>3</sup> )	3.5					3.5					3.7			3.2	
Flame retardant	UL94V-0					UL94V-0					UL94V-0			—	
Environment	RoHS directive					RoHS directive					—			RoHS directive Halogen-free	

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