

Noise Suppression Sheets

Flexield

For multipurpose

IRJ/IFL series

Issue date: August 2012

- 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

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 - 100 $\frac{A}{(2)}$ $\frac{B}{(3)}$ $\frac{300 \times 200}{(5)}$ $\frac{\#}{(7)}$

- (1) Material name
- (2) Magnetic sheet thickness(100: 100 μ m)
- (3) Surface film thickness symbol
- (4) Double-sided tape thickness symbol
- (5) Length(300: 300mm)
- (6) Width(200: 200mm)
- (7) Product symbol

SPECIFICATIONS

Type (Features/Application)	Flame retardant High μ /High characteristic	Flame retardant High μ /High frequency band	Thin type High μ /High characteristic	Thin type High μ /High frequency band
Material name	IRJ17	IRJ09	IFL12	IFL10M
Recommended frequency range	5MHz to 3GHz	10MHz to 3GHz	5MHz to 3GHz	10MHz to 3GHz
Operating temperature range (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85
Initial permeability[at 1MHz]typ.	170	100	180	120
Resistivity(Ω /square) min.	1M	1M	100K	1M
Thermal conductivity (W/m • K)	1.7	1.7	1.5	1.5
Standard sheet dimensions (mm)	300x200	300x200	300x200	300x200
Standard magnetic sheet thickness (mm)	0.1, 0.2, 0.3	0.1, 0.2, 0.3	0.05, 0.1	0.025, 0.05, 0.1
Compatible with rolls	—	—	✓	✓
Flame retardant	UL94V-0	UL94V-0	—	—
Environment	RoHS directive	RoHS directive	RoHS directive Halogen-free	RoHS directive Halogen-free

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Product Identifications of The Standard Sample

IRJ SERIES

IRJ17 - $\frac{100}{(1)}$ $\frac{N}{(2)}$ $\frac{D}{(3)}$ $\frac{300}{(4)}$ \times $\frac{200}{(6)}$

- (1) Material name
- (2) Magnetic sheet thickness (100: 100 μ m)
- (3) Surface film thickness symbol (N: Correspondence thickness)
- (4) Double-sided tape thickness symbol (D: 30 μ m)
- (5) Length(300: 300mm)
- (6) Width(200: 200mm)
- (7) Product symbol(No)

	IRJ09	IRJ17
Correspondence thickness(mm)	0.1, 0.2, 0.3	0.1, 0.2, 0.3
Product name of the standard sample	IRJ09-100ND300 \times 200 IRJ09-200ND300 \times 200 IRJ09-300ND300 \times 200	IRJ17-100ND300 \times 200 IRJ17-200ND300 \times 200 IRJ17-300ND300 \times 200

IFL SERIES

IFL12 - $\frac{100}{(1)}$ $\frac{N}{(2)}$ $\frac{B}{(3)}$ $\frac{300}{(4)}$ \times $\frac{200}{(6)}$

- (1) Material name
- (2) Magnetic sheet thickness (100: 100 μ m)
- (3) Surface film thickness symbol (N: Correspondence thickness)
- (4) Double-sided tape thickness symbol (B: 10 μ m)
- (5) Length(300: 300mm)
- (6) Width(200: 200mm)
- (7) Product symbol(No)

	IFL10M	IFL12
Correspondence thickness(mm)	0.025, 0.5, 0.1	0.05, 0.1
Product name of the standard sample	IFL10M-025NB300 \times 200 IFL10M-050NB300 \times 200 IFL10M-100NB300 \times 200	IFL12-050NB300 \times 200 IFL12-100NB300 \times 200