

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.

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 A B 300 × 200 #
(1) (2) (3) (4) (5) (6) (7)

- (1) Material name
- (2) Magnetic sheet thickness(100: 100μm)
- (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) | 300×200 | 300×200 | 300×200 | 300×200 |
| 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 - $\frac{100}{(1)}$ $\frac{N}{(2)}$ $\frac{B}{(4)}$ $\frac{300}{(5)}$ \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 |