

Noise Suppression Sheets/Magnetic Sheets/Radio Wave Absorbers Flexield®

FOR RFID MAGNETIC SHEETS IRL, IRJ, IVM, IRB, IRE MATERIALS

Flexield® is a highly flexible and shock resistant soft magnetic sheet material consisting of magnetic material and resin. It is highly effective when used in reader/writers or attached to tags and metal components used in emerging RFID systems based on the 13.56MHz band. With an extensive lineup of products that deliver excellent permeability, Flexield® allows designers to match impedance with ease and delivers excellent magnetic convergence. These products are also more lightweight and resistant to shock compared to sintered ferrite materials.



FEATURES

- They are flexible(Will not crack).
- They are suited for thin and compact devices.
- Available in a wide range of dimensions and shapes.
- Environmentally products(All products: Lead-free) are also available.

APPLICATIONS

- For improving reception performance in RFID reader/writers.
- Integrate IC cards with metal.
- Integrate IC tags with metal.

PRODUCT IDENTIFICATIONS

IRL02	A	H	300	x	300	x	2
(1)	(2)	(3)	(4)		(5)		(6)

(1) Material name

(2) A denotes: Both adhesive taped products

A: Standard type

AB: Thin type

(3) H denotes: Half-cutting products

(4) Length(300: 300mm)

(5) Width(300: 300mm)

(6) Thickness(2: 2mm)

SPECIFICATIONS

NEW

Material name	IRL02				IRL03		IRL04			IRJ01		IRB02				IVM06	
Operating temperature range (°C)	-40 to +85				-40 to +85		-40 to +85			-40 to +125		-40 to +70				-40 to +85	
Initial permeability μ_i [at 10MHz]typ.	25				25		35			20		7				13	
Resistivity(Ω /square) min.	1M				1M		10k			1M		1M				1G	
Thermal conductivity (W/m • k)	1.4				1.4		1.4			1.0		1.2				1.3	
Standard sheet dimensions (mm)	200×200		300×200		300×200		300×200			250×250		300×300				300×200	
Standard sheet thickness (mm)	1	2	0.05	0.1	0.25	0.5	0.25	0.5	1	0.5		1	2	3	6	0.4	
Standard sheet weight (g)	100	200	10	20	50	100	50	100	200	85		300	600	900	1800	80	
Density(g/cm³)	3.2		2.5		3.4		3.3			2.5		3.3				3.3	
Features	Standard type				Standard type		High permeability			High-resisting		Available thick type				High insulation	
Flame retardant	—				—		(Also available for UL94 approved products.)			UL94V-1		—				UL94V-0	
Environment	Lead / Halogen-free				Lead free		Lead / Halogen-free			Lead / Halogen-free		Lead / Halogen-free				Lead free	

※ It may not be allowed to export these Flexields due to Export Control regulations.

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