# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



TDK EMC Technology

**TDK Flexield** 



### Noise Suppression Sheets

Flexield® is an absorptive electromagnetic shielding material consisting of magnetic material and resin. It suppresses noise radiated from electronic equipment over a wide range of frequencies, offers flexibility in fabrication and delivers particularly excellent performance in high frequency ranges. Flexield® is the ideal sheet-type noise reduction product for mobile devices including notebook PCs, digital cameras and cell phones.

#### \* All Product Conforming to RoHS Directive

#### \*Features

- •They are flexible(Will not crack).
- \* Applications 1
- •They are suited for thin and compact devices.
- •Available in a wide range of dimensions and shapes.
- •The products in the line-up support a wide range of frequency bands(10M-

•Electromagnetic noise reduction for electric equipment (especially for mobile equipment) Internal EMI, resonance reduction(mounting inside a shielded box)

Flexield

• RF-block • Amplifier

Radiated noise reduction(Circuit, IC, flat cable)

- Surface current suppression
- Improvement of noise immunity
- SAR reduction for mobile phone Countermeasure1



#### \*Materials list by thickness

Standard sheet thickness (mm)	Halogen-free	Flame retardant UL94V-0
0.05	IRL02	
0.1	IRL05	IRJ04
0.25	IRL04	IRJ04
0.5	IRL04	IRJ04
1.0	IRL02	
2.0	IRI 02	

#### \* Specifications

*	<u>Method</u>	of	naming	the	products	



A

AB

AT

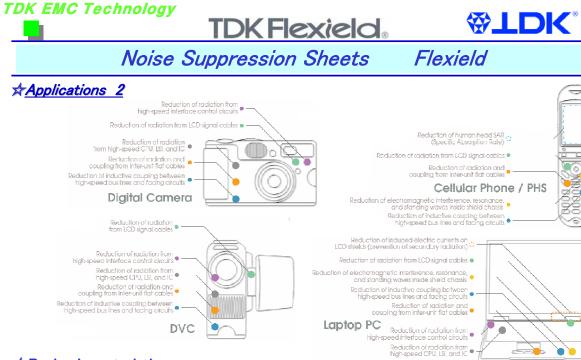
0.03mm

0.01mm

			NEW	NEW	NEW
	IRL	_02	IRL04	IRL05	IRJ04
Recommended frequency range	100MHz <sup>~</sup> 10GHz		50MHz <sup>~</sup> 10GHz	10MHz~10GHz	50MHz <sup>~</sup> 10GHz
Operating temperature range (°C)	-40~+85		-40~+85	-40~+85	-40~+85
Initial permeability μi [at 10MHz]	≧20		≧30	≧50	≧35
Resistivity(Ω/□) min.	≧1M		≧10K	≧1G(The magnetic layer/10 <sub>typ.)</sub>	≧1M
Environment		Product Conforming to RoHS Directive			
Flame retardant	_			UL94V-0	
Standard sheet dimensions (mm)	300X200	200X200	300X200	300X200	300X200
Standard sheet thickness (mm)	0.05	1,2	0.25,0.5	0.11(The magnetic layer/0.1)	0.1,0.25,0.5

· All specifications are subject to change without notice.

• It may not be allowed to export these absorbers due to Export Control regulations.



#### \*Basic characteristics

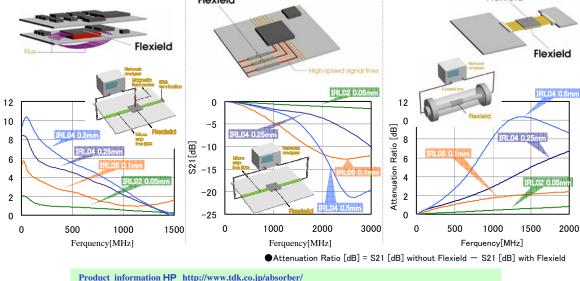
Attenuation Ratio [dB]

The decoupling effect Reduces the opposite line of highfrequency magnetic-field elements occurring due to signal lines and Ics inside devices and reduces inductive coupling of cohesive units

### The filter effect Reduces the effects of high-frequency elements by adding impedance to signal lines Flexield High-speed signal lines IRL02 0.05mm

#### Common-mode electrical

current reduction effect Reduces the common-mode electrical current elements superposed in the flexible cables connecting high-speed circuits and the like. Flexield



TDK Corporation EMC engineering business div. Sales Tokunaga/Hattori E-mail; shtoku@mb1.tdk.co.jp/hhattori@mb1.tdk.co.jp 1-13-1,Nihonbashi,Chuo-ku,Tokyo 103-8272 ,Japan TEL:81-3-5201-7288 FAX:81-3--5201-7277

· All specifications are subject to change without notice.

2005.08.30

• It may not be allowed to export these absorbers due to Export Control regulations.