

FINEMET®
EMC Components
[Catalog]



Absorshield® K-EK series **Halogen-free Noise Suppression Sheet with Flame Retardant**

Absorshield® K-EK series is the noise suppression sheet made of FINEMET® powder, high permeability nanocrystalline soft magnetic material. This high performance noise suppression sheet is complied with UL94 V-0 and is halogen-free.

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1. Features

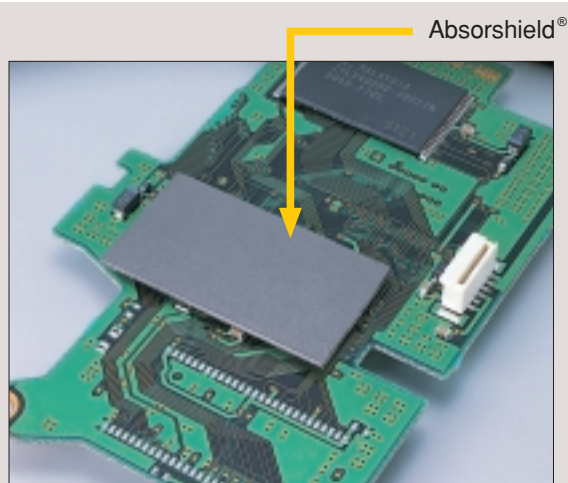
1. Made of FINEMET® powder (nanocrystalline soft magnetic material) blended with resin, its high complex relative permeability allows high suppression effect of radiation noise in a range from 0.1GHz to10GHz.
2. Environmental friendly due to its halogen-free elements.
3. Complies with UL94 V-0,Test for Flammability of Plastic Materials for Parts in Devices and Applications. (File No. E210819)
4. Better flexibility than our conventional product (K-E series) and thus easy to handle.
5. Easily punch and cut in various shape

2. Major Applications

Highly effective in suppression of radiation noise and cross-talk noise by using Absorshield® K-EK series for personal computer, mobile phone, digital video disk, digital camera, digital video camera, car navigation system, Optical communication system, etc.

Installation Examples

- 1 In flexible flat cables connecting with LCD and board in mobile phone
- 2 On IC in digital video camera
- 3 In multi-layer circuit board
- 4 Surrounding of LCD
- 5 On internal surface of housing



Digital Video Camera

3. Typical Properties

Shape	A4 size sheet*			Long rolled sheet			Testing method
	210mm × 297mm			300mm × 20m	330mm × 20m		
Dimensions							
Thickness (mm)	0.13	0.25	0.50	0.13	0.25	0.50	
Product code	F1AH0946	F1AH0948	F1AH0950	F1AH0943	F1AH0944	F1AH0945	
P/N	K-EK013 210-297-T0	K-EK025 210-297-T0	K-EK050 210-297-T0	K-EK013 300-20M-T0	K-EK025 330-20M-T0	K-EK050 330-20M-T0	
Complex relative permeability (1GHz)	μ_r'	8.5					S-parameter method (Coaxial line)
	μ_r''	9.0					
Density (kg/m ³)	3.5 × 10 ³					Dimension and weight	
Tensile strength (MPa)	1.5					JIS K6251	
Surface resistivity (Ω/m)	1 × 10 ⁹					JIS K6271	
Flame Retardant	V-0 (UL File No. E210819)					UL94	
Operating temperature range	-40~85°C						

*As optional, A4 size sheet with double-sided adhesive tape is available



For safety and the proper usage, you are requested to approve our product specifications or to transact the approval sheet for product specifications before ordering. This catalog and its contents are subject to change without notice.

4. Characteristics

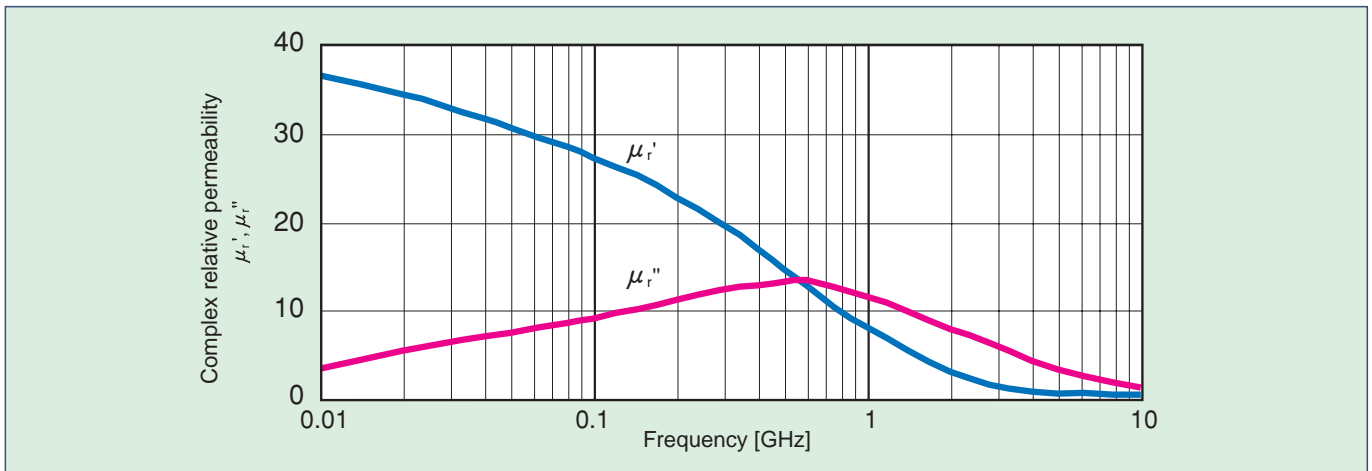


Fig.1 Frequency dependence of complex relative permeability

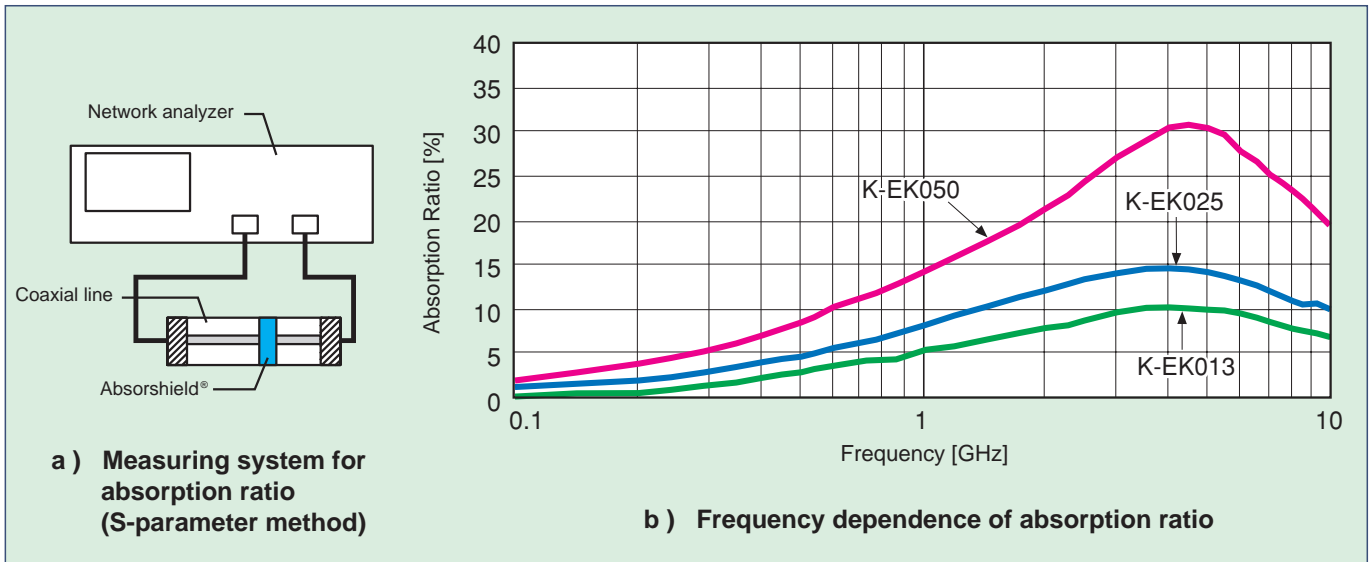


Fig.2 Measuring system and the chart of absorption ratio

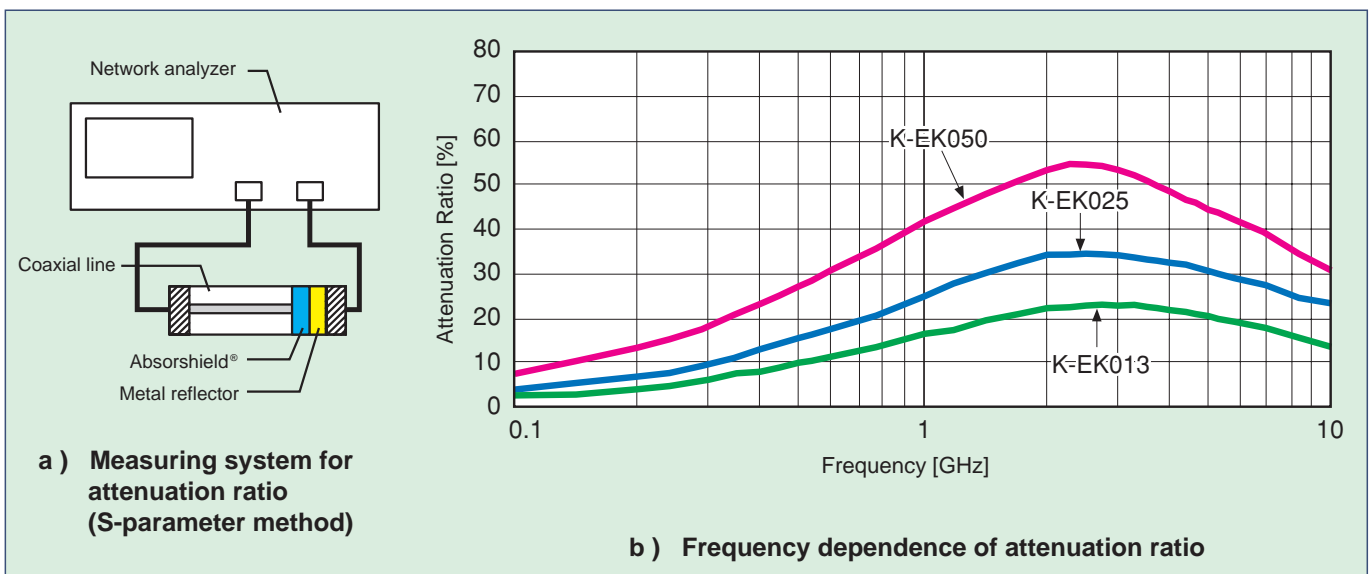


Fig.3 Measuring system and the chart of attenuation ratio



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