



Technical Data Sheet

U Series

Electromagnetic wave noise suppression sheet



A. Product description

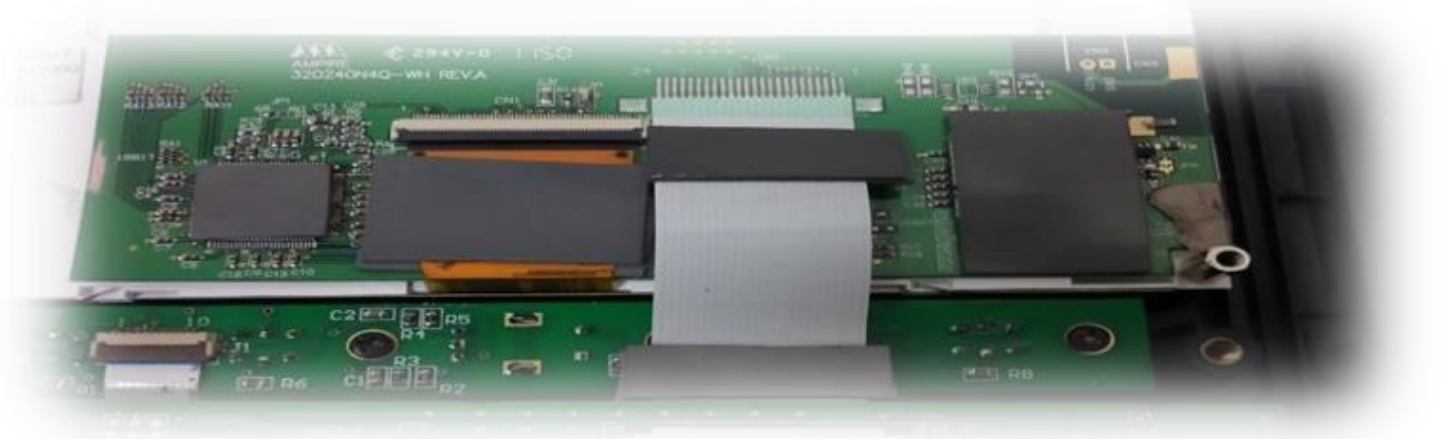
FeedPool® U Series is a series of high magnetic loss materials, can suppress or attenuate the electromagnetic wave interference noise of electronic equipment, can be applied in the 100KHz ~ 6GHz frequency band, can be according to the magnetic permeability μ' size, thickness and Attenuation (as shown in Figure 3) to select the appropriate model, it can also be used with conductive/insulating materials to solve the problem of electromagnetic interference noise.

B. Product characteristics

- High permeability μ' product selection, from $150\mu'$ ~ $300\mu'$
- The absorption band is wide, from 100KHz ~ 6GHz.
- The elastic material is thin and lightweight, suitable for thin electronic devices.
- We can provide rolls or sheet materials according to customer needs.

C. Product application

- Noise absorption of 3C electronic devices, blocking and loss of radiated electromagnetic waves.
- High radiated noise suppression of electronic components (e.g. circuit boards, IC chips, cables).
- The current suppression on the surface of the circuit board also protects the circuit board line from interference from external signals.





D. Product specifications

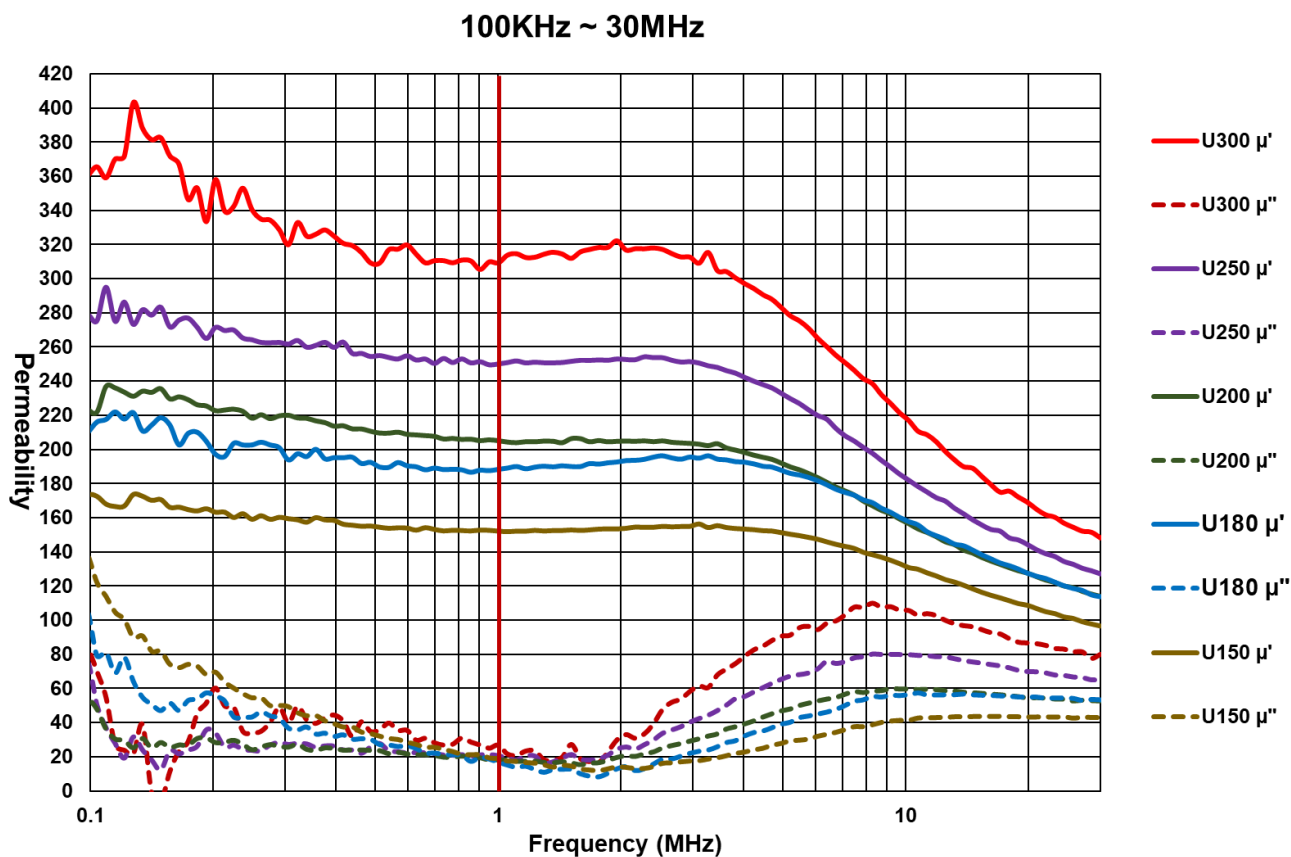
PROJECT	U150	U180	U200	U250	U300	UNIT
Permeability $\mu' \pm 15\%$ @1MHz	150	180	200	250	300	--
Dielectric constant $\epsilon' \pm 10\%$ @1MHz	9.0	8.9	9.1	8.4	2.2	--
$\tan \delta_{\mu}$ @1MHz	0.11524	0.0799	0.0887	0.0763	0.0688	--
$\tan \delta_{\epsilon}$ @1MHz	0.0508	0.0417	0.0420	0.0452	0.0356	--
Attenuation $\pm 10\%$ @6GHz	65	76	80	85	53	dB/cm
Density	3.5	3.5	3.8	3.6	3.7	g/cm ³
Thickness	0.05 ~ 0.50					mm
Application band	100KHz ~ 6GHz					--
Operating temperature	-40 ~ 120					°C
Surface resistance	$\geq 10^6$					Ω/\square
Standard size	Sheet / Coil / According to customer needs					--
Adhesive thickness	According to customer needs					mm

E. Guidelines for the use of electromagnetic noise suppression sheets

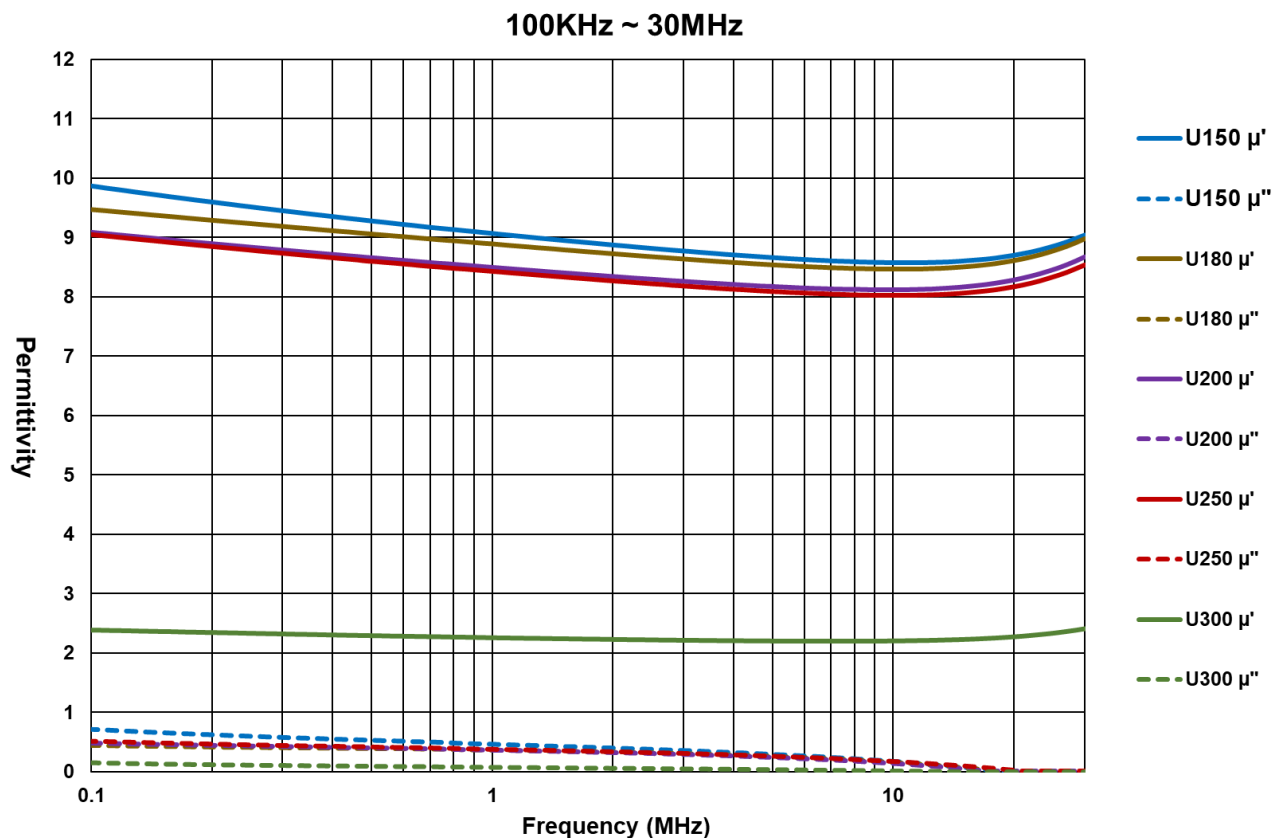
- UXXX-YYY series is a high magnetic loss attenuation material developed for 100kHz ~ 6GHz EMI problems, and is selected and used according to the size of the μ' value. Generally speaking μ' the larger the value, the larger the corresponding μ' , and the stronger its ability to attenuate electromagnetic waves. Therefore, if you want to attenuate the same dB number, the thickness chosen is also thinner. Conversely, the smaller the μ' , the smaller the corresponding μ'' , and the thickness chosen to achieve the same number of dB attenuation is also thicker. The attenuation selection of frequencies at different thicknesses requires reference to the Attenuation diagram (as shown in Figure 3).
- If you have problems related to electromagnetic noise, you can also take the initiative to contact our company, and we will diagnose and select appropriate suppression materials for you with professional and advanced equipment and instruments.



F. Permeability (100KHz~30MHz) Figure (1).

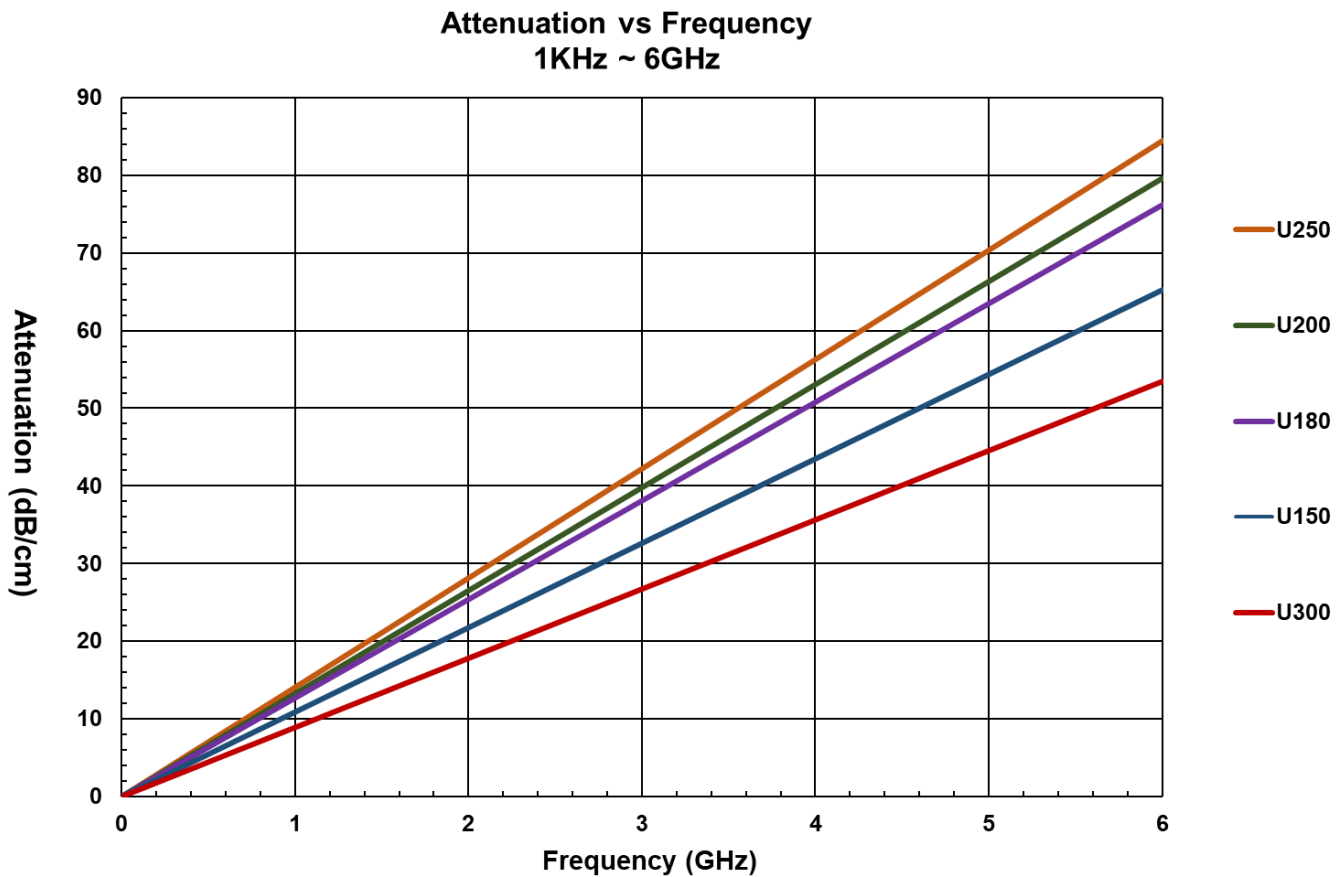


G. Dielectric constant Permeability (100KHz~30MHz) Figure (2).





H. Attenuation (1MHz ~ 6GHz) Figure(3)



I. Product ID

UXXX-(C/I)YYY C:Conductive materials I:Insulating materials
X : Model (U150 ~ U300) Paradigm : (Model : U150 XXX: U150)
Y : Thickness (0.05mm ~ 0.50mm) Paradigm : (Thickness : 0.1mm YYY: 010)

J. General information

- For information on the safe handling of this product, please refer to the Safety Data Sheet (SDS).
- Technical data is tested under the laboratory conditions of Feedpool Technology Co., Ltd.

Feedpool Technology Co., Ltd.

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