

Standard material characteristics (High μ material)

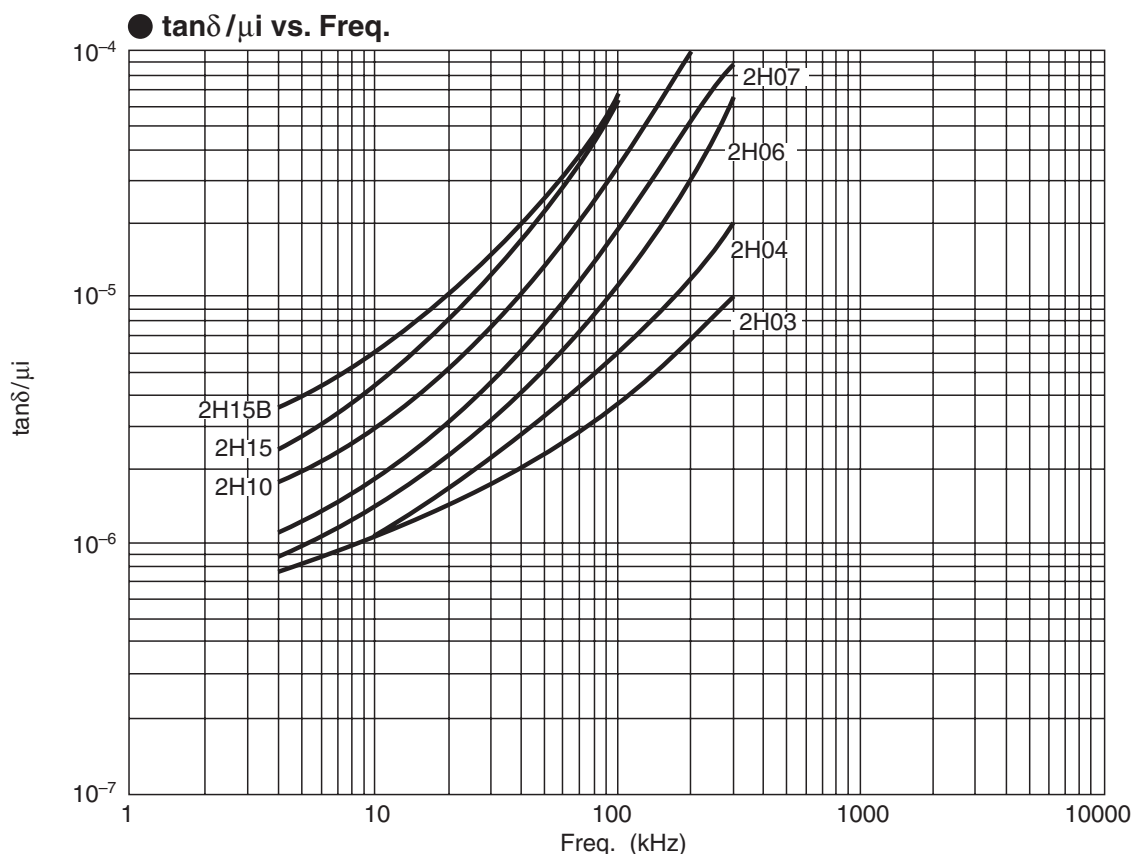
Property	Symbol	Condition	Unit	2H03	2H04	2H06	2H07	2H10	2H15	2H15B
AC initial permeability	μ_i	0.01 MHz	—	2500 ($\pm 20\%$)	4500 ($\pm 20\%$)	6500 ($\pm 20\%$)	7500 ($\pm 20\%$)	10000 ($\pm 20\%$)	15000 ($\pm 20\%$)	10000 ($\pm 20\%$)
Relative loss factor	$\tan\delta/\mu_i$	—	$\times 10^{-6}$	<4 (100 kHz)	<10 (100 kHz)	<30 (100 kHz)	<5 (10 kHz)	<7 (10 kHz)	<10 (10 kHz)	<10 (10 kHz)
Temperature coefficient	$\alpha_{\mu r}$	-30°C~20°C	$\times 10^{-6}$	—	0~2.0	0~2.0	0~1.5	0~1.5	0.5~2.5	-1~1
		20°C~55°C		—	—	—	—	—	—	—
		20°C~70°C		—	0~2.0	0~2.0	-0.5~1.5	-0.5~1.5	-0.5~1.5	-0.5~2.0
Saturation magnetic flux density	Bs	1000 A/m 23 °C	mT	470	420	420	410	400	370	370
Residual magnetic flux density	Br	23 °C	mT	100	80	80	60	60	50	50
Coercivity	Hc	23 °C	A/m	12.8	8	8	4	3	2	2
Hysteresis material constant	ηB	0.01 MHz	510 ⁻⁶ /mT	—	<0.8	<0.8	<0.6	<1.0	<1.0	<1.0
Disaccommodation factor	DF	—	$\times 10^{-6}$	—	<3.0	<3.0	<3.0	<2.0	<2.0	<2.0
Curie temperature	Tc	—	°C	>200	>140	>140	>130	>120	>100	>100
Resistivity	ρ	—	$\Omega \cdot m$	1	1	0.2	0.1	0.01	0.01	0.01
Apparent density	d	—	$\times 10^3$ kg/m ³	4.8	4.8	4.8	4.9	4.9	5.0	5.0

Note: 1) The values were obtained with toroidal cores (FR25/15/5).
 2) The values were obtained at 23±2 °C unless otherwise specified.
 3) Initial permeability was measured at 10kHz, 0.8A/m.

2H Series

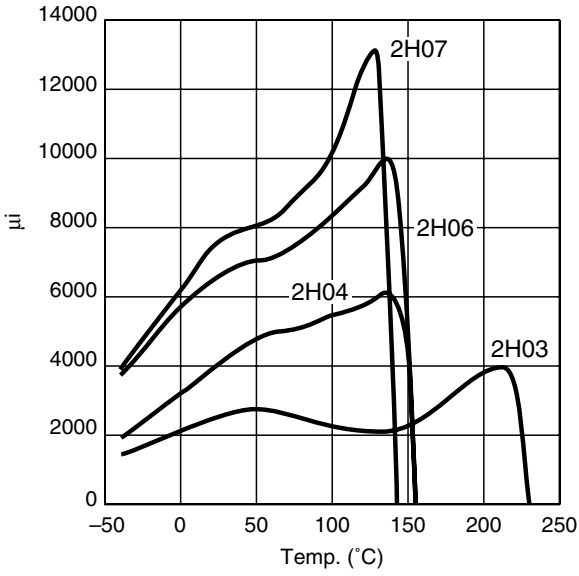
2H series are high permeability material with μ 2500~15000, which are suitable for common mode noise suppressor (conforming FCC, VDE, VCCI regulation) and for interface (pulse) transformers of digital telecommunication network systems. 2H07 ($\mu=7000$) and 2H10 ($\mu=10000$) are FDK's standard high permeability materials with superb characteristics and cost performance, and suitable for common mode noise suppressors. 2H10 shows superior characteristics in frequency lower than 500 kHz and suitable for noise suppression.

2H15 ($\mu=15000$) and 2H15B ($\mu=10000$) are the latest super permeability materials for interface (pulse) transformers. 2H15 is suitable for pulse transformers of telecommunication equipments for indoor use. 2H15B has specially stable temperature characteristics, and its permeability curve remains flat in temperature range from -30 °C up to +85 °C, thus makes it suitable for pulse transformers of telecommunication equipments of outdoor use.

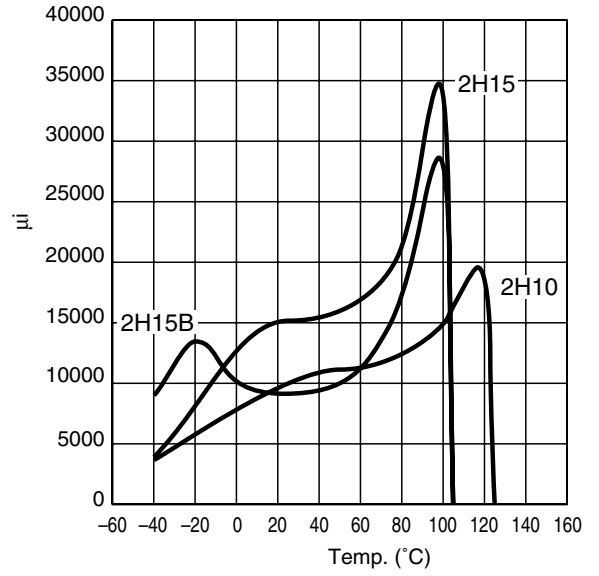


2H Serise

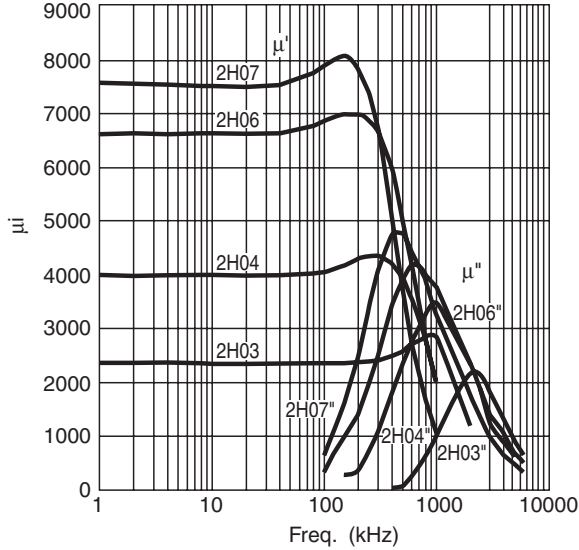
● μ_i vs. Temp.



● μ_i vs. Temp.



● μ_i vs. Freq.



● μ_i vs. Freq.

