



# 秦皇岛市燕秦纳米科技有限公司

Qinhuangdao Yanqin Nano Science and Technology Co., Ltd.

## YN-NT-C-HDU Series Nanocrystalline Core with Anti-saturation and High Linear Permeability

P/N Part Number	Core		Case			Cross	Path	G	A <sub>L</sub>		Saturation	
	Dimension		Dimension			Section	Length		Nominal		Current, Isat	
	da x di x h	D <sub>a</sub>	D <sub>i</sub>	H	A <sub>Fe</sub>	l <sub>Fe</sub>	m <sub>Fe</sub>	10 kHz	100 kHz	10 kHz	100 kHz	
	mm	mm	mm	mm	cm <sup>2</sup>	cm	g	μH		A		
								Permeability				
YN-NT-C-HDU120805A	12 x 8.0 x 5.0	14.4	6.4	7.2	0.08	3.14	2	13	7	0.2	0.4	
								40	21K			
YN-NT-C-HDU161008C	16 x 10 x 8.0	17.8	8.1	10	0.19	4.1	5.6	12.5	9.1	1.2	1.7	
								22K	16K			
YN-NT-C-HDU201210C	20 x 12 x 10	22.6	10.3	10.2	0.24	5.1	11.3	17	12.3	0.4	0.7	
								22K	16K			
YN-NT-C-HDU181110C	21 x 15 x 10	23.6	12.6	12.8	0.23	5.65	9.53	22.5	10.3	0.4	0.7	
								30K	20K			
YN-NT-C-HDU261610C	25 x 16 x 10	27.9	13.6	12.5	0.36	6.4	17	22	14.0	0.4	0.9	
								30K	20K			
YN-NT-C-HDU322015C	32 x 20 x 15	34.6	17.0	18.2	0.69	8.2	42	31.0	21.0	0.5	1.1	
								30K	20K			
YN-NT-C-HDU281810C	28 x 18 x 15	30.2	15.8	18.5	0.60	7.22	32	20.1	20	0.6	1.3	
								30K	20K			
YN-NT-C-HDU403215C	40 x 32 x 15	43.1	28.7	18.5	0.46	11.3	38	15.4	10.3	2.7	3.7	
								30K	20K			
YN-NT-C-HDU403215D	40 x 32 x 15	43.1	28.7	18.5	0.46	11.3	38	12.2	7.9	3.7	5.1	
								23.7K	15.3K			
YN-NT-C-HDU403215E	40 x 32 x 15	43.1	28.7	18.5	0.46	11.3	38	2.3	2.2	16.6	17.1	
								4.47K	4.4K			
YN-NT-C-HDU402515C	40 x 25 x 15	43.1	22.5	18.5	0.86	10.2	64	25.4	17.2	2.9	4.2	
								23.8K	16.1K			
YN-NT-C-HDU462725A	46 x 27 x 25	48.4	24.4	18.2	1.82	11.5	153	100	40			
								50K	20K			
YN-NT-C-HDU504020A	50 x 40 x 20	53.5	36.3	23.4	0.76	14.1	79	45.3	13.5	1	2	
								66.1K	20K			
YN-NT-C-HDU504020C	50 x 40 x 20	53.5	36.3	23.4	0.76	14.1	79	18	10	3.6	5.5	
								26.2K	14.6K			
YN-NT-C-HDU655025A	65 x 50 x 25	67.3	46.5	28.6	1.24	17.8	161	62	18.1	1.2	2.5	
								60.0K	20.4K			
YN-NT-C-HDU655025C	65 x 50 x 25	67.3	46.5	28.6	1.24	17.8	161	23.3	14.0	4.5	7	
								23.2K	13.9			
YN-NT-C-HDU655025F	65 x 50 x 25	67.3	46.5	28.6	1.24	17.8	163	3.5	3.40	30	31	
								3.5K	3.3			
YN-NT-C-HDU805020C	80 x 50 x 20	86	44.7	25.7	2.28	20.4	342	42	21	4.6	9.1	
								30K	15K			
YN-NT-C-HDU805020F	80 x 50 x 20	86	44.7	25.7	2.28	20.4	347	7.2	6.7	27.3	29.1	
								5K	4.7K			
YN-NT-C-HDU906020C	90 x 60 x 20	95.4	54.7	24.7	2.28	23.6	395	36.5	18.8	5.3	10.5	
								30K	15K			
YN-NT-C-HDU906020F	90 x 60 x 20	95.4	54.7	24.7	2.28	23.6	400	6.1	5.8	31.5	33.6	
								5K	4.7K			
YN-NT-C-HDU1008020D	100 x 80 x 20	105.5	75	24.8	1.54	28.3	379	13.7	8.9	9.5	12.2	
								20K	13K			
YN-NT-C-HDU1008020F	100 x 80 x 20	105.5	75	24.8	1.54	28.3	379	3.4	3.2	37.8	40.8	
								5K	4.7K			
YN-NT-C-HDU1027625C	102 x 76 x 25	108.1	70	30.3	2.47	28	508	34.5	16.9	6.2	12.5	
								30K	15K			
YN-NT-C-HDU1027625D	102 x 76 x 25	108.1	70	30.3	2.47	28	508	23	14.6	9.3	14.5	
								20K	13K			
YN-NT-C-HDU1027625F	102 x 76 x 25	108.1	70	30.3	2.47	28	515	5.6	5.3	37.4	39.8	
								5K	4.7K			
YN-NT-C-HDU13010030C	130 x 100 x 30	136	94	36	3.5	36	920	36.2	18.1	8.1	16.1	
								30K	15K			
YN-NT-C-HDU13010030D	130 x 100 x 30	136	94	36	3.5	36	920	24	15.6	12.1	16.7	
								20K	13K			
YN-NT-C-HDU13010030F	130 x 100 x 30	136	94	36	3.5	36	920	6	5.5	48.3	51.5	
								5K	4.7			
YN-NT-C-HDU16013025B	160 x 130 x 25	166.9	123.9	31	2.89	46	970	23.9	12	10.2	21.3	
								30K	15K			
YN-NT-C-HDU16013025D	160 x 130 x 25	166.9	123.9	31	2.89	46	970	15.9	10.5	15.2	23.6	
								20K	13K			
YN-NT-C-HDU16013025F	160 x 130 x 25	166.9	123.9	31	2.89	46	970	4	3.7	60.6	64.9	
								5.0K	4.7K			
YN-NT-C-HDU17012025C	170 x 120 x 25	178	112	32	2.89	46	1600	26.5	20	15.2	19.6	
								20K	15K			
YN-NT-C-HDU17012025F	170 x 120 x 25	178	112	32	2.89	46	1600	6.7	6.4	60.9	64.9	
								5K	4.8K			
YN-NT-C-HDU20016030C	200 x 160 x 30	207	153	37	4.62	57	1800	30.8	15.4	12.6	25.2	
								30K	15K			
YN-NT-C-HDU20016030F	200 x 160 x 30	207	153	37	4.62	57	1800	5.2	4.8	75.6	80	
								5K	4.7K			

\*1) AL at 10 kHz has a tolerance at +40 % / -30 % of nominal value, AL at 100 kHz has a tolerance at +30 % / -25 % of nominal value.

\*\*2) Isat is a calculated value for saturation current when Bm is at 70% of saturation flux density for core at room temperature.

Add: High-tech Venture Base, No. 47 Zhujiang Road, Qinhuangdao Development Zone

Http://www.yanqin.com

Tel: 0335-8056776



### Hysteresis Curves for Common Mode Choke NL-G and HDU Series Cores

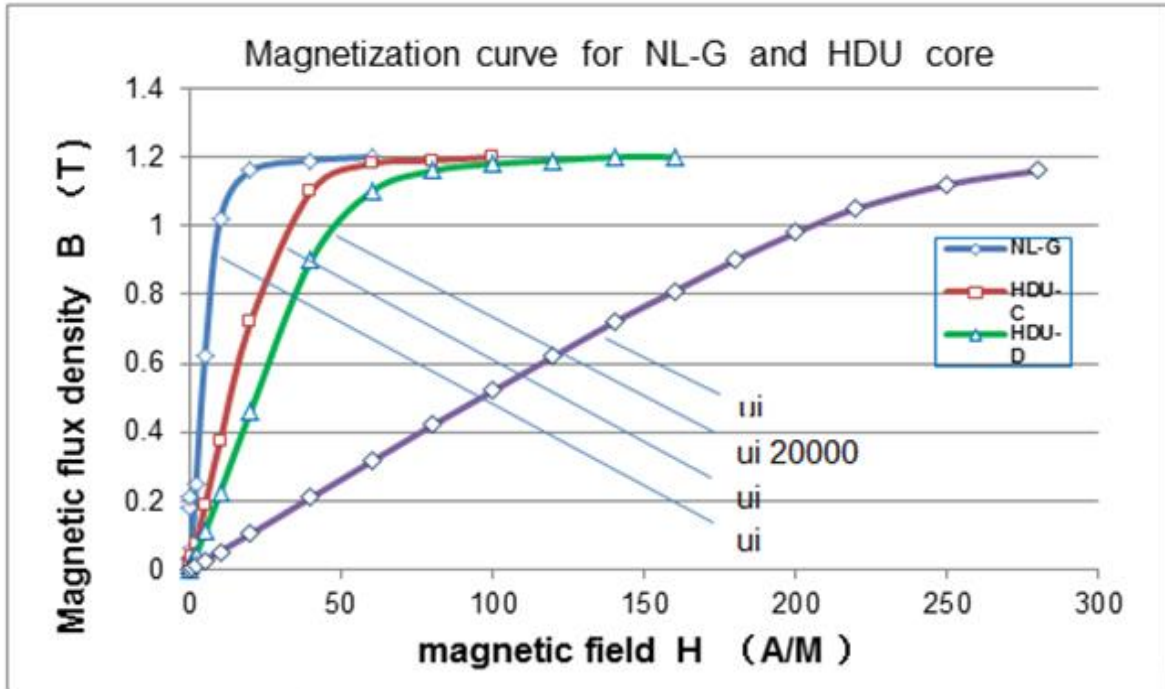


Figure 1 DC hysteresis curve for NL and HDU series nanocrystalline cores

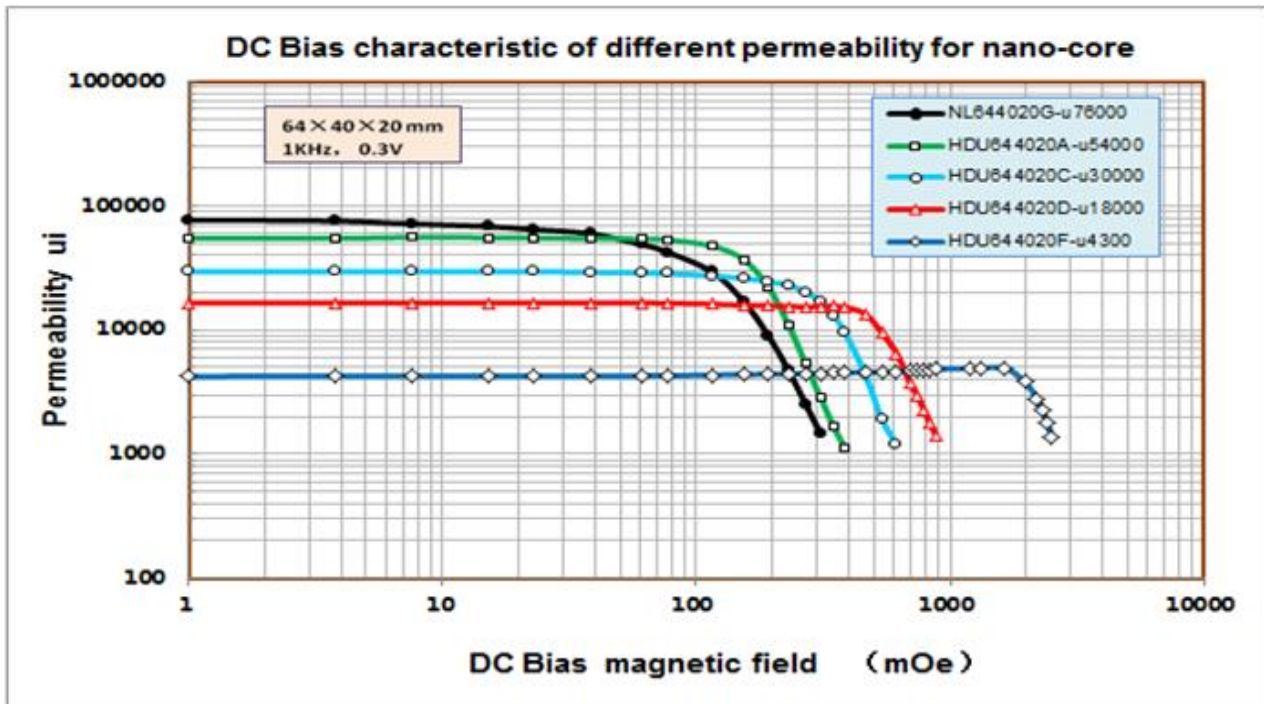


Figure 2 DC bias characteristics for NL and HDU series cores

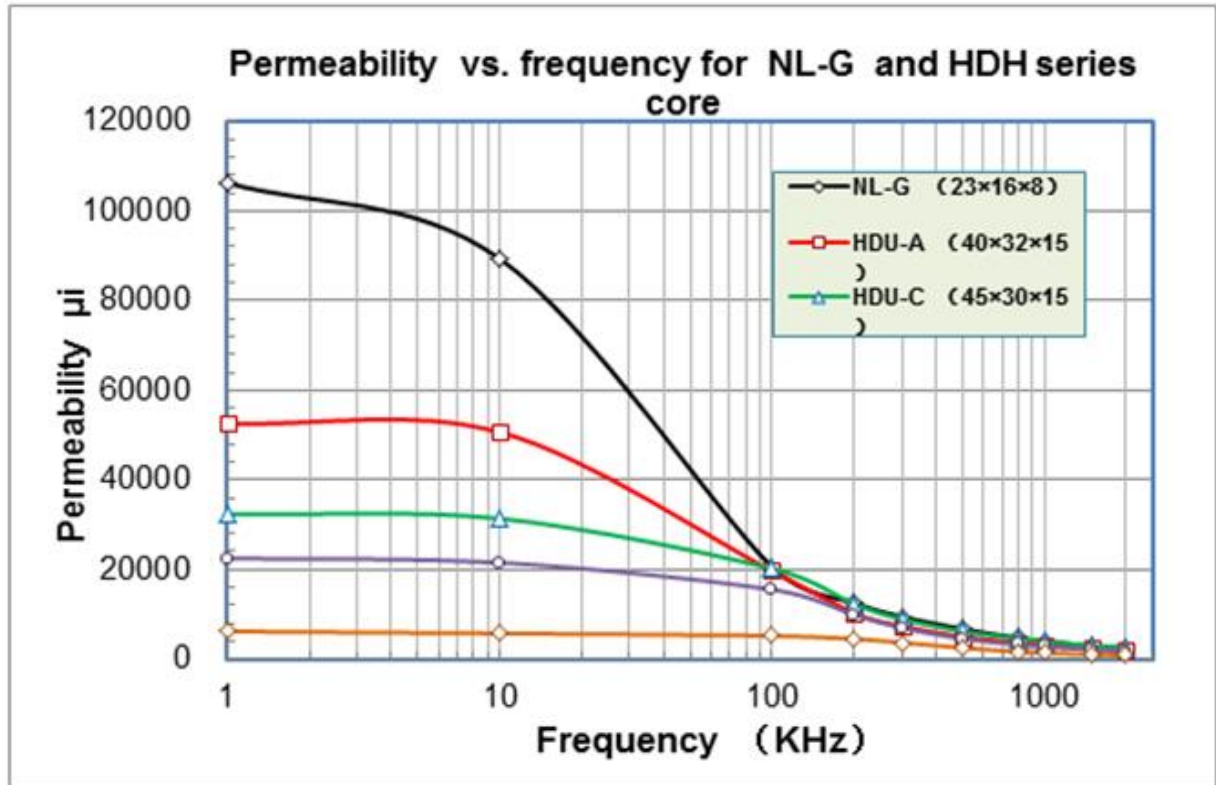


Figure 3 Permeability vs. frequency for NL-G and HDU series cores