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Specification

NC

0001

L

w

01

Code introduction:

Nanocrystalline Core

Specification No

Low Br

Color

Feature No

A/1

r	VAC Part Number	寸 Core dimensions		截 Iron cross section AFe cm ²	Mean path length lFe cm	重量 Weight mFe g	Permeability (μ at 10kHz)		AL nominal μ H		Saturation current typical A	
		铁芯尺寸 Core dimensions OD x ID x H mm x mm x mm	成品尺寸 Finished core size OD x ID x H mm x mm x mm				指定范围值 Specified value	设计参考值 Design refer	10kHz	100kHz	10kHz	100kHz
NC-0100-L-c-02	W620	16 x 12.5 x 6	17.8 x 10.7 x 8	0.08	4.5	2.6	50000 ≤ μ ≤ 96700	67000	15	4.8	0.5	0.8
NC-0100-L-c-01	W619						20000 ≤ μ ≤ 38700	26800	6	3.9	1.1	1.7
NC-0035-L-c	W867	22 x 17 x 6	24.0 x 15.2 x 8.0	0.12	6.1	5.4	50000 ≤ μ ≤ 96700	67000	16.4	4.3	0.6	1.2
NC-0088-L-c-01	W622	25 x 20 x 10	27.3 x 17.5 x 12.3	0.19	7.1	9.9	50000 ≤ μ ≤ 96700	67000	22.5	7.2	0.7	1.4
NC-0088-L-c-02	W621						20000 ≤ μ ≤ 38700	26700	9	5.8	1.7	2.7
NC-0018-L-c-03	W676	30 x 25 x 15	32.3 x 22.7 x 17.5	0.27	8.6	17.4	50000 ≤ μ ≤ 96700	66000	26.5	8.5	0.9	1.7
NC-0008-L-c	W911	30 x 20 x 10	32.5 x 17.8 x 12.5	0.40	7.9	23.1	65600 ≤ μ ≤ 127000	87000	56	13.4	0.6	1.2
NC-0015-L-c	W624	40 x 32 x 15	42.3 x 29.1 x 17.8	0.44	11.3	36	50000 ≤ μ ≤ 96700	67000	32.5	10.3	1.1	2.2
NC-0015-L-c-01	W623						20000 ≤ μ ≤ 38700	26700	13	8.4	2.8	4.3
NC-0015-L-c-02	W886	45 x 32 x 15	47.3 x 29.8 x 17.8	0.71	12.1	63.3	20000 ≤ μ ≤ 38700	26600	19.7	12.8	3	4.6
NC-0016-L-c-01	W626	50 x 40 x 20	52.3 x 37.1 x 22.8	0.73	14.1	76	50000 ≤ μ ≤ 96700	66000	43	13.8	1.4	2.7
NC-0016-L-c-02	W625						20000 ≤ μ ≤ 38700	26100	17	11.2	3.6	5.4
NC-0299-L-c	W627	63 x 50 x 20	65.5 x 46.6 x 27.8	0.95	17.8	124	20000 ≤ μ ≤ 38700	26700	18	11.6	4.4	6.7
NC-0299-L-c-01	W721						12900 ≤ μ ≤ 25000	20000	11.5	10.4	6.9	8.7
NC-0300-L-c	W628	80 x 63 x 20	83 x 59.5 x 22.8	1.24	22.5	205	20000 ≤ μ ≤ 38700	26700	18.5	12	5.6	8.5
NC-0300-L-c-01	W722						12900 ≤ μ ≤ 25000	17300	11.9	10.7	8.7	11
NC-0230-L-c	W629	100 x 80 x 20	104 x 75 x 23	1.46	28.3	303	20000 ≤ μ ≤ 38700	26700	17.3	11.2	7.1	10.7
NC-0230-L-c-01	W723						12900 ≤ μ ≤ 25000	17300	11.2	10	10.9	13.8
NC-0186-L-c-01	W567	130 x 100 x 25	134.5 x 95.0 x 28.5	2.85	36.10	757	37500 ≤ μ ≤ 72500	50000	50	19.4	4.8	8.5
NC-0186-L-c	W630						20000 ≤ μ ≤ 38700	26600	25.4	16.5	9	13.6
NC-0186-L-c-02	W587						12900 ≤ μ ≤ 25000	17200	16.4	14.7	14	17.7
NC-0032-L-c	W631	160 x 130 x 25	165 x 125 x 28.5	2.74	45.6	917	20000 ≤ μ ≤ 38700	26700	20.1	13.1	11.3	17.1
NC-0032-L-c-01	W720						12900 ≤ μ ≤ 25000	17200	13	11.7	17.6	22.3
NC-0209-L-c-01	V105	194 x 155 x 25	200 x 149 x 28.5	3.71	54.8	1490	40000 ≤ μ ≤ 77300	53000	45.3	14.7	6.9	12.5
NC-0209-L-c	W908						12900 ≤ μ ≤ 25000	17600	14.7	13.2	20.7	26.4

(-25%~+45%)

VAC Part Number	Core dimensions		Iron cross section	Mean path length	铁芯重量 Weight	Permeability (μ at 10kHz)		AL nominal μ H		饱和电流 Saturation current typical A		
	铁芯尺寸 Core dimensions OD x ID x H mm x mm x mm	成品尺寸 Finished core size OD x ID x H mm x mm x mm				指定范围值 Specified value		10kHz	100kHz	10kHz	100kHz	
	AFe cm ²	lFe cm				mFe g	设计参考值 Design refer					
NC-0178-L-w	W914	9.8 x 6.5 x 4.5	11.2 x 5.1 x 5.8	0.06	2.6	1.1	65600 $\leq \mu' \leq$ 127000	87000	25.5	6.4	0.2	0.4
NC-0010-L-w	W902	12 x 8 x 4.5	14.1 x 6.6 x 6.3	0.07	3.1	1.7	72000 $\leq \mu' \leq$ 139000	97000	28	6.8	0.2	0.4
NC-0226-L-w	W498	12.5 x 10 x 5	14.3 x 8.5 x 7.0	0.05	3.5	1.3	42200 $\leq \mu' \leq$ 81500	56000	10	3.6	0.4	0.8
NC-0039-L-w	W865	15 x 10 x 4.5	17.1 x 7.9 x 6.5	0.09	3.9	2.6	72000 $\leq \mu' \leq$ 139000	94000	27	6.7	0.3	0.5
NC-0217-L-w	W403	16 x 10 x 6	17.9 x 8.1 x 8.1	0.14	4.1	4	72000 $\leq \mu' \leq$ 135000	97000	43	10.1	0.3	0.6
NC-0217-L-w-01	W308					4	18000 $\leq \mu' \leq$ 35000	23700	11.7	6.5	1.2	1.7
NC-0179-L-w	W515	17.5 x 12.6 x 6	19.0 x 11.0 x 8.0	0.12	4.7	4.1	72000 $\leq \mu' \leq$ 135000	96000	30	6.9	0.3	0.7
NC-0044-L-w-01	W838	19 x 15 x 10	21.2 x 13.0 x 12.3	0.16	5.3	6.3	72000 $\leq \mu' \leq$ 130000	96000	36.1	8.8	0.4	0.7
NC-0038-L-w	W409	20 x 12.5 x 8	22.6 x 10.3 x 10.2	0.24	5.1	9	72000 $\leq \mu' \leq$ 135000	97000	55.2	13.6	0.4	0.7
NC-0038-L-w-01	W450					9	18100 $\leq \mu' \leq$ 35000	23700	14.3	9.1	1.4	2.1
NC-0088-L-w-03	W523	25 x 20 x 10	27.6 x 17.4 x 12.8	0.20	7.1	10.4	60000 $\leq \mu' \leq$ 116000	80000	28.4	7.3	0.6	1.1
NC-0141-L-w-01	W380	25 x 16 x 10	27.9 x 13.6 x 12.5	0.36	6.4	17	72000 $\leq \mu' \leq$ 135000	95000	65.5	15.5	0.4	0.9
NC-0141-L-w-02	W451					17	15000 $\leq \mu' \leq$ 35000	24300	17	11.5	1.7	2.6
NC-0141-L-w-04	W980					17	3300 $\leq \mu' \leq$ 6400 (100kHz)	4400	3.2	3.1	9.3	9.6
NC-0008-L-w-01	W423	30 x 20 x 10	32.8 x 17.6 x 12.5	0.40	7.9	23	72000 $\leq \mu' \leq$ 135000	103000	59.3	14	0.5	1
NC-0008-L-w-14	W358					23	19500 $\leq \mu' \leq$ 35200	25500	15.5	11.1	2.1	3.1
NC-0008-L-w-11	W981					23	3280 $\leq \mu' \leq$ 6400 (100kHz)	4400	2.9	2.8	11.4	11.8
NC-0058-L-b	W514	30 x 20 x 15	32.8 x 17.5 x 17.8	0.57	7.9	33	72000 $\leq \mu' \leq$ 135000	96000	88	20	0.5	1.1
NC-0015-L-w-03	W422	40 x 32 x 15	43.1 x 28.7 x 18.5	0.46	11.3	38	72000 $\leq \mu' \leq$ 135000	95000	47.2	11.1	0.8	1.5
NC-0015-L-w-04	W452					38	15000 $\leq \mu' \leq$ 29000	20000	12.2	7.9	3.7	5.1
NC-0015-L-w-10	W964					38	3160 $\leq \mu' \leq$ 6300 (100kHz)	4300	2.3	2.2	16.6	17.1
NC-0023-L-b-02	W424	40 x 25 x 15	43.1 x 22.5 x 18.5	0.86	10.2	64	72000 $\leq \mu' \leq$ 135000	94000	101	23.1	0.7	1.4
NC-0023-L-b-06	W453					64	17850 $\leq \mu' \leq$ 34500	23700	25.4	17.2	2.9	4.2
NC-0177-L-b	V102	45 x 30 x 15	48.3 x 26.4 x 18.2	0.86	11.8	74	72000 $\leq \mu' \leq$ 135000	96000	87.5	20.3	0.8	1.6
NC-0177-L-b-01	V118					74	20000 $\leq \mu' \leq$ 38700	26700	24.3	15.9	3	4.5
NC-0177-L-b-02	V101					74	12900 $\leq \mu' \leq$ 25000	17200	15.7	14.3	4.6	5.8
NC-0016-L-w-02	W516	50 x 40 x 20	53.5 x 36.3 x 23.4	0.76	14.1	79	50000 $\leq \mu' \leq$ 97000	66000	45.3	14	1.4	2.7
NC-0016-L-w-03	W565					79	20000 $\leq \mu' \leq$ 38700	26600	18	10	3.5	5.3
NC-0017-L-b	W517	63 x 50 x 25	67.3 x 46.5 x 28.6	1.24	17.8	161	50000 $\leq \mu' \leq$ 97000	67000	58.6	18.1	1.8	3.5
NC-0017-L-b-01	V110					161	20000 $\leq \mu' \leq$ 38700	26500	23.3	13.5	4.4	6.7
NC-0017-L-b-02	W985					163	2850 $\leq \mu' \leq$ 5510 (100kHz)	3700	3.3	3.2	30.2	30.9
NC-0147-L-b	V140	80 x 50 x 20	86.0 x 44.7 x 25.7	2.28	20.4	342	71250 $\leq \mu' \leq$ 137000	95000	94	28	1.4	2.8
NC-0147-L-b-02	W531					342	18700 $\leq \mu' \leq$ 36300	24900	35	24	5.5	8.2
NC-0147-L-b-04	V091					347	\geq 5170	5170	9.6	9.2	26.4	27.3
NC-0096-L-b-01	W518	90 x 60 x 20	95.4 x 54.7 x 24.7	2.28	23.6	395	50000 $\leq \mu' \leq$ 97000	67000	81	25.1	2.4	4.5
NC-0096-L-b-02	W984					400	2800 $\leq \mu' \leq$ 5400 (100kHz)	3700	4.6	4.5	40.9	41.8
NC-0188-L-w	V082	100 x 80 x 25	105.5 x 75.0 x 29.6	1.90	28.3	379	50000 $\leq \mu' \leq$ 97000	67000	56.3	16.9	2.8	5.3
NC-0188-L-w-01	V081					379	12900 $\leq \mu' \leq$ 25000	17200	14.5	13.1	10.9	13.8
NC-0144-L-b	W468	102 x 76 x 25	108.1 x 70.0 x 30.3	2.47	28.0	508	50000 $\leq \mu' \leq$ 97000	67000	68.8	21.6	3.8	6.7
NC-0144-L-b-02	V080					508	12900 $\leq \mu' \leq$ 25000	17200	19.1	17.2	10.7	13.6
NC-0144-L-b-01	W947					515	2840 $\leq \mu' \leq$ 5480 (100kHz)	3800	4.3	4.2	47.4	48.5
NC-0032-L-b-03	V074	160 x 130 x 25	166.9 x 123.9 x 30.5	2.74	45.60	917	27680 $\leq \mu' \leq$ 59590	36000	26.8	13.7	8.4	13.6
NC-0032-L-b-02	V088					917	20000 $\leq \mu' \leq$ 38700	26500	20.1	13.1	11.3	17.1
NC-0032-L-b	V066					917	12900 $\leq \mu' \leq$ 25000	17200	12.9	11.7	17.6	22.3
NC-0032-L-b-04	W982					2.85	45.60	967	2800 $\leq \mu' \leq$ 5400 (100kHz)	3700	3	2.9

Performance Curve

Fig.1 Magnetic hysteresis loop for different permeability

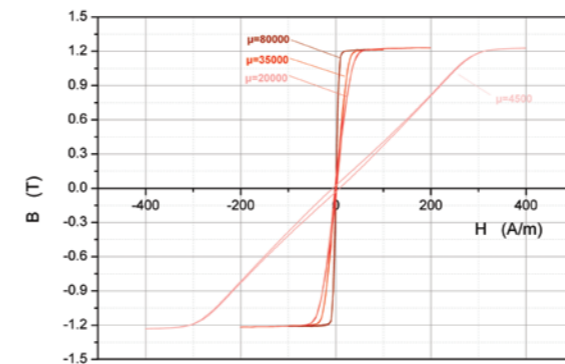


Fig2. Permeability characteristics under DC bias fields for various type of nanocrystalline

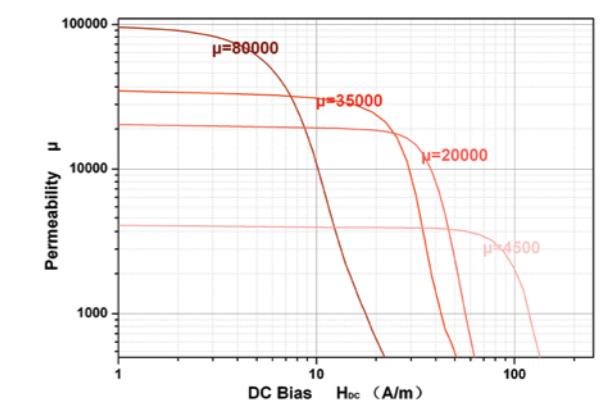


Fig.3 Frequency response of the permeability

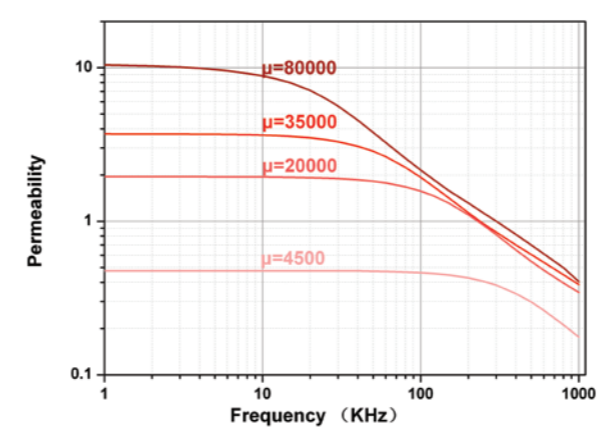
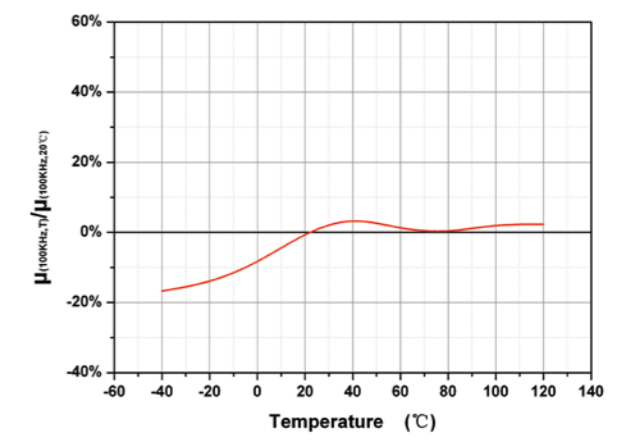
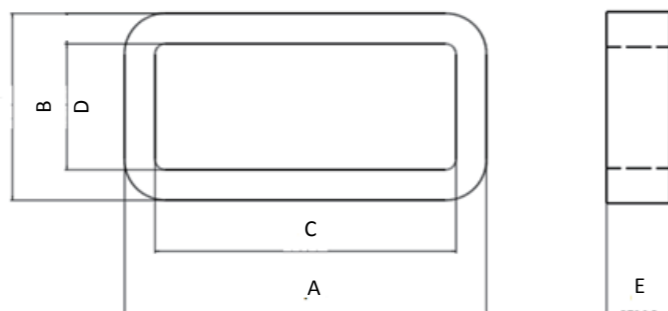


Fig.4 Realitive change of μ vs Temperature





中研料号	磁芯尺寸					成品尺寸					截面面积 iron cross section Afe cm ²	磁路长度 mean path length lFe cm	铁芯重量 weight mFe g	磁导率Permeability (μ at 10kHz)		单匝电感量 AL 10 kHz 100 kHz nominal μ H
	A	B	C	D	E	A	B	C	D	E				指定范围值 specified value	设计参考值 design refer	
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)						
TSNC-0778-L-b														50000 ≤ μ' ≤ 97000	μ=80000	48
TSNC-0778-L-b-01	772.5	44.5	58.5	30.5	15.0	77.5	49.5	53.5	25.5	18.5	0.82	17.3	105.0	17850 ≤ μ' ≤ 34500	μ=30000	18
TSNC-0778-L-b-02														11000 ≤ μ' ≤ 23000	μ=20000	12
TSNC-0778-L-b-03														2800 ≤ μ' ≤ 5400 (100kHz)	μ=4500	2.7
TSNC-0800-L-b	88.8	53.3	68.0	32.5	15.0	94.0	58.5	63.0	27.5	18.8	1.24	20.5	187.0	17850 ≤ μ' ≤ 34500	μ=30000	22
TSNC-0535-L-b	92.9	41.0	80.9	29.0	15.0	96.8	45.0	76.8	25.0	18.0	0.70	21.3	110.0	50000 ≤ μ' ≤ 97000	μ=80000	28
TSNC-0598-L-b(矩形)	108.8	41.6	96.7	29.4	12.0	113.2	46.0	91.2	24.0	16.0	0.57	25.8	109.0	45000 ≤ μ' ≤ 95000	μ=80000	18

1. Welcome other specification concerning customer's demand of dimensions and performance

2., 例如PBT (130℃)、FR52G30 (140℃)、FR530 (155℃)、PPS (180℃) 等

3. Welcome other specification concerning customer's demand of adjusting the location of mounting hole of the case

