



Nanocrystalline Common Mode Choke Core

Characteristic

Saturated induction density	T	1.2
(μ) Permeability	Gs/Oe	8.5×10^4
(10kHz) Permeability	Gs/Oe	8.0×10^4
(100kHz) Permeability	Gs/Oe	2.0×10^4
Curie temperature Tc	°C	570
(ρ) Density	g/cm ³	7.2
(δ) Resistivity	$\mu\Omega \cdot \text{cm}$	≥ 130
(k) Stack Factor	—	≥ 0.8





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Specifications:

Transmart Part number	VAC Part number	Core dimensions		iron cross section A_{Fe} cm^2	mean path length l_{Fe} cm	weight m_{Fe} g	Permeability (μ at 10kHz)		A_L 10 kHz 100 kHz nominal μH	saturation current typical 10 kHz 100 kHz A
		Core dimensions $d_a \times d_i \times h$ $mm \times mm \times mm$	Finished core size $OD \times ID \times H$ $mm \times mm \times mm$				specified value	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	$65600 \leq \mu' \leq 127000$	87,000	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	$72000 \leq \mu' \leq 139000$	97,000	28.0 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	$42200 \leq \mu' \leq 81500$	56,000	10.0 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	$72000 \leq \mu' \leq 139000$	94,000	27.0 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	$72000 \leq \mu' \leq 135000$	97,000	43.0 10.1	0.3 0.6
NC-0217-L-w-01	W308					4	$18000 \leq \mu' \leq 35000$	23,700	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	$72000 \leq \mu' \leq 135000$	96,000	30.0 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	$72000 \leq \mu' \leq 130000$	96,000	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	9.0	$72000 \leq \mu' \leq 135000$	97,000	55.2 13.6	0.4 0.7
NC-0038-L-w-01	W450					9.0	$18100 \leq \mu' \leq 35000$	23,700	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	$60000 \leq \mu' \leq 116000$	80,000	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	17.0	$72000 \leq \mu' \leq 135000$	95,000	65.5 15.5	0.4 0.9
NC-0141-L-w-02	W451					17.0	$15000 \leq \mu' \leq 35000$	24,300	17.0 11.5	1.7 2.6
NC-0141-L-w-04	W980					17.0	$3300 \leq \mu' \leq 6400$ (100kHz)	4,400	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	23.0	$72000 \leq \mu' \leq 135000$	103,000	59.3 14.0	0.5 1.0
NC-0008-L-w-14	W358					23.0	$19500 \leq \mu' \leq 35200$	25,500	15.5 11.1	2.1 3.1
NC-0008-L-w-11	W981					23.0	$3280 \leq \mu' \leq 6400$ (100kHz)	4,400	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	$72000 \leq \mu' \leq 135000$	96,000	88.0 20.0	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	$72000 \leq \mu' \leq 135000$	95,000	47.2 11.1	0.8 1.5
NC-0015-L-w-04	W452					38	$15000 \leq \mu' \leq 29000$	20,000	12.2 7.9	3.7 5.1
NC-0015-L-w-10	W964					38	$3160 \leq \mu' \leq 6300$ (100kHz)	4,300	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	$72000 \leq \mu' \leq 135000$	94,000	101.0 23.1	0.7 1.4
NC-0023-L-b-06	W453					64	$17850 \leq \mu' \leq 34500$	23,700	25.4 17.2	2.9 4.2





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		Core dimensions $d_a \times d_i \times h$ mm x mm x mm	Finished core size OD x ID x H mm x mm x mm				specified value	design refer	10 kHz	100 kHz	10 kHz	100 kHz
NC-0177-L-b	V102	45 x 30 x 15	48.3 x 26.4 x 18.2	0.86	11.8	74	$72000 \leq \mu' \leq 135000$	96,000	87.5	20.3	0.8	1.6
NC-0177-L-b-01	V118					74	$20000 \leq \mu' \leq 38700$	26,700	24.3	15.9	3.0	4.5
NC-0177-L-b-02	V101					74	$12900 \leq \mu' \leq 25000$	17,200	15.7	14.3	4.6	5.8
NC-0016L-w-02	W516	50 x 40 x 20	53.5 x 36.3 x 23.4	0.76	14.1	79	$50000 \leq \mu' \leq 97000$	66,000	45.3	14.0	1.4	2.7
NC-0016-L-w-03	W565					79	$20000 \leq \mu' \leq 38700$	26,600	18.0	10.0	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	$50000 \leq \mu' \leq 97000$	67,000	58.6	18.1	1.8	3.5
NC-0017-L-b-01	V110					161	$20000 \leq \mu' \leq 38700$	26,500	23.3	13.5	4.4	6.7
NC-0017-L-b-02	W985					163	$2850 \leq \mu' \leq 5510$ (100kHz)	3,700	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	$71250 \leq \mu' \leq 137000$	95,000	94	28	1.4	2.8
NC-0147-L-b-02	W531					342	$18700 \leq \mu' \leq 36300$	24,900 5,170	35.0	24.0	5.5	8.2
NC-0147-L-b-04	V091					347	≥ 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	$50000 \leq \mu' \leq 97000$	67,000 3,700	81.0	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	$50000 \leq \mu' \leq 97000$	67,000	56.3	16.9	2.8	5.3
NC-0188-L-w-01	V081					379	$12900 \leq \mu' \leq 25000$	17,200	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	$50000 \leq \mu' \leq 97000$	67,000	68.8	21.6	3.8	6.7
NC-0144-L-b-02	V080					508	$12900 \leq \mu' \leq 25000$	17,200	19.1	17.2	10.7	13.6
NC-0144-L-b-01	W947					515	$2840 \leq \mu' \leq 5480$ (100kHz)	3,800	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 2.74 2.74 2.85	45.6 45.6 45.6 45.6	917	$27680 \leq \mu' \leq 59590$	36,000	26.8	13.7	8.4	13.6
NC-0032-L-b-02	V088					917	$20000 \leq \mu' \leq 38700$	26,500	20.1	13.1	11.3	17.1
NC-0032-L-b	V066					917	$12900 \leq \mu' \leq 25000$	17,200	12.9	11.7	17.6	22.3
NC-0032-L-b-04	W982					967	$2800 \leq \mu' \leq 5400$ (100kHz)	3,700	3.0	2.9	79.3	81.1

Note: Customized sizes available.

