



# SENDUST TOROIDAL POWER INDUCTORS

## FEATURES

- \* Sendust Powdered Iron Toroidal Construction.
- \* Optimized For Use as High Frequency DC Chokes.
- \* Temp Rise Data: Ripple Currents < 10% @ 100KHz
- \* Low Cost Self Lead Construction.
- \* Lower AC Losses Than Normal Powdered iron

**NOTES:** Temp Rise T1 & T2 are calculated.

- 1) L<sub>n</sub> = Nominal Ind. @ 0.0Adc  
     L1 = Nominal Ind. @ I1 Adc, T1 Temp Rise  
     L2 = Nominal Ind. @ I2 Adc, T2 Temp Rise
- 2) I1 Represents a 1-20% Drop in L<sub>n</sub>  
     I2 Represents a 20-40% Drop in L<sub>n</sub>

### ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -55°C TO +105°C

PART NUMBER	L <sub>n</sub> (μH)	DCR (Ohm)	L1 (μH) @ I1 (dc A)	T1 (°C)	L2 (μH) @ I2 (dc A)	T2 (°C)	REF. DIMENSIONS IN INCHES						
							A	C	VT/B	HT/B	PIN OD		
VTK-01001	10	0.024	10	1	12	8	2	47	.31	.16	.14	.29	.014
VTK-02001	20	0.030	18	1	9	13	2	36	.38	.18	.16	.36	.016
VTK-05001	50	0.054	42	1	10	31	2	39	.48	.21	.19	.46	.016
VTK-10001	100	0.102	82	1	12	57	2	46	.59	.25	.23	.57	.016
VTK-15001	150	0.091	127	1	6	96	2	24	.76	.32	.30	.74	.020
VTK-25001	250	0.171	210	1	9	154	2	33	.92	.32	.30	.90	.018
VTK-01002	10	0.008	9	2	6	7	4	23	.51	.24	.21	.48	.025
VTK-02002	20	0.012	17	2	5	12	4	20	.63	.28	.25	.59	.032
VTK-05002	50	0.032	37	2	17	22	4	66	.60	.26	.24	.58	.0225
VTK-10002	100	0.043	79	2	9	53	4	33	.95	.34	.31	.92	.0285
VTK-15002	150	0.053	117	2	8	80	4	30	1.06	.40	.36	1.03	.0285
VTK-25002	250	0.053	205	2	5	150	4	21	1.24	.56	.52	1.20	.032
VTK-01005	10	0.005	9	5	6	7	10	22	1.00	.39	.33	.94	.051
VTK-02005	20	0.006	16	5	6	12	10	22	1.11	.45	.39	1.05	.051
VTK-05005	50	0.010	36	5	9	20	10	36	1.11	.45	.39	1.05	.051
VTK-10005	100	0.021	80	5	8	57	10	33	1.67	.57	.51	1.61	.051
VTK-15005	150	0.026	124	5	8	90	10	30	1.85	.75	.69	1.79	.050
VTK-20005	200	0.030	154	5	9	108	10	35	1.85	.75	.69	1.79	.051
VTK-30005	312	0.037	258	5	11	194	10	32	2.18	1.00	.84	2.10	.051
VTK-02007	20	0.004	18	7	5	13	14	19	1.32	.63	.56	1.24	.064
VTK-05007	50	0.010	41	7	8	29	14	29	1.70	.60	.53	1.63	.064
VTK-10007	100	0.013	78	7	8	54	14	30	1.88	.78	.70	1.80	.064
VTK-15007	150	0.020	128	7	7	96	14	28	2.18	.95	.86	2.10	.064
VTK-20007	200	0.025	168	7	8	120	14	32	2.18	.95	.86	2.10	.064
VTK-05010	50	0.006	40	10	7	33	16	18	1.91	.81	.72	1.82	.064
VTK-25010	250	0.027	167	10	26	122	16	50	2.19	1.10	.85	2.10	.057
VTK-07012	70	0.009	60	12	14	55	16	20	2.21	.98	.88	2.12	.080
VTK-01025	12	0.0023	9.4	25	26	8.7	30	32	2.25	.95	.75	1.85	.100



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**ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -55°C TO +105°C**

PART NUMBER	Ln (μH)	Rate IDC	DCR (Ohm)	L1 @ I1 T1			L2 @ I2 T2			REF. DIMENSIONS IN INCHES				
				(μH)	(dc A)	(°C)	(μH)	(dc A)	(°C)	A	C	VT/B	HT/B	PIN OD
VTK-00001	10	7.37	0.010	9.0	1.7	15	8.0	3.3	40	.31	.16	.14	.29	.036
VTK-00002	25	5.20	0.020	22.5	1.00	15	20.0	1.9	40	.38	.18	.16	.36	.032
VTK-00003	50	3.95	0.035	45.0	0.70	15	40.0	1.3	40	.48	.21	.19	.46	.028
VTK-00004	75	3.50	0.045	67.5	0.60	15	60.0	1.1	40	.59	.25	.23	.57	.025
VTK-00005	100	3.15	0.055	90.0	0.50	15	80.0	0.95	40	.76	.32	.30	.74	.025
VTK-00006	150	2.35	0.100	135.0	0.40	15	120.0	0.75	35	.92	.32	.30	.90	.020
VTK-00007	200	1.98	0.140	180.0	0.35	15	160.0	0.65	35	.51	.24	.21	.48	.018
VTK-00008	250	1.85	0.160	225.0	0.30	15	200	0.60	35	.63	.28	.25	.59	.018
VTK-00009	330	1.70	0.190	297.0	0.27	15	264	0.50	35	.60	.26	.24	.58	.018


Specifications subject to change without notice.



# SENDUST TOROIDAL POWER INDUCTORS

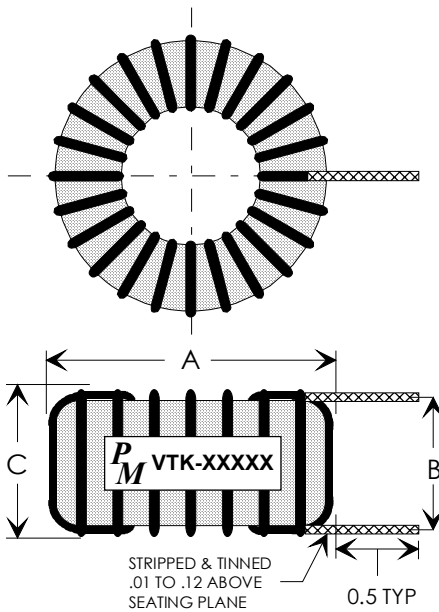
VTK-XXXX MECHANICAL

HTK-XXXX MECHANICAL

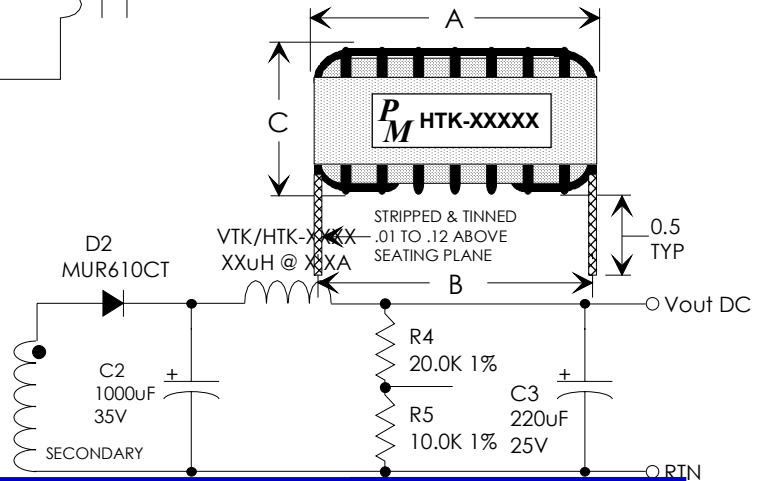
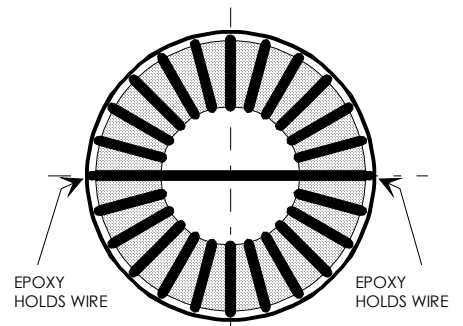
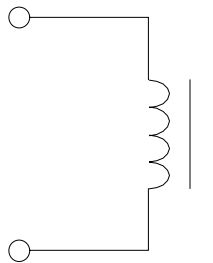
VTK-XXXXX OUTLINE  
VERTICAL MOUNT

SCHEMATIC

HTK-XXXXX OUTLINE  
HORIZONTAL MOUNT

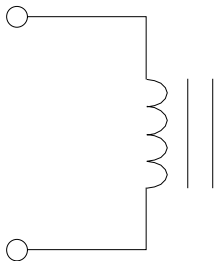


**HORIZONTAL OR VERTICAL MOUNT:**  
Table Part Numbers are Vertical Mount.  
Change the "V" to "H" for Horizontal Mount.  
Example:  
VTK-05001 = Vertical Mount 50uH, 1.0Adc  
HTK-05001 = Horizontal Mount 50uH, 1.0Adc



SCHEMATIC

APPLICATION



VARIATIONS AVAILABLE. FOR INTERMEDIATE VALUES AND/OR CUSTOM DESIGNS PLEASE CONSULT THE FACTORY.

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