

- 1. When designing a component using this product and applying the designed components in any system, use this product only in the guaranteed range specified by Proterial, Ltd. Do not use the product beyond guaranteed values specified by Proterial, Ltd. Proterial, Ltd. will not be responsible for any damage or accident when this product is used beyond guaranteed values specified by Proterial, Ltd. Even when the product is used within the specification given by Proterial, Ltd., take appropriate measures for system, such as failsafe, to avoid any accident resulting in any bodily injury and/or property damage. It is the responsibility of a user to take such measures.
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- 3. Take appropriate measures, such as using an overvoltage protective device to prevent high voltage surge from being applied to the product if direct lightning surge, inductive lightning surge, switching surge, etc. is likely to applied to this product. This product may deteriorate in function when high-voltage surge is applied. It is the responsibility of the user to take such measures.
- 4. The user is responsible for checking the fitness of the production in radiation environment.
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PROTERIAL

Power Electronics
Components
[Catalog]

January '23



Amorphous Normal Mode Choke Coils **HLM series**

The AM series is a family of normal mode choke coils using our uniquely processed amorphous powder core HIDUST® HLM50 with significant features. This series is the suited for higher switching and downsizing applications especially using SiC or GaN power device.

HIDUST® is a registered mark of Proterial Ferrite Electronics, Ltd.

Proterial, Ltd.

Amorphous Nomal Mode Choke Coils

HIDUST® HLM series

1 Features

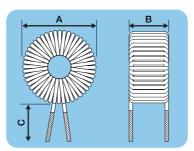
The HLM series is a family of normal mode choke coil using our uniquely processed amorphous powder core HIDUST® HLM50 with significant feaures below.

1. Excelent DC biased inductance

50% higher saturation flux density than Sendust powder core

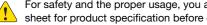
2. Low Core Loss

40% lower core loss than Sendust powder core



Standard Lineup

Part Name	Rated		Inductance L (µH) ± 25%		Dimensions (mm)			Rdc
	Current (A)	at 0 A	at Rated Current	Diameter Φ (mm)	A Max	B Max	C ±5	(mΩ) Max
HLM200505100	1.5	300	260	0.5	18	10	10	280
HLM20050654	2.5	88	78	0.6	18	11	10	110
HLM20050826	5.0	20	18	0.8	19	11	10	30
HLM22070670	2.5	173	155	0.6	23	13	10	160
HLM22071035	6.0	43	37	1.0	24	14	10	30
HLM22071216	11.0	9	8	1.2	25	15	10	10
HLM26070861	4.0	145	130	0.8	28	14	10	86
HLM26071152	6.0	106	85	1.1	28	15	10	42
HLM26071432	10.0	40	33	1.4	29	16	10	30
HLM26121827	14.0	50	38	1.8	30	23	10	12
HLM36120990	4.0	550	460	0.9	35	25	10	150
HLM36121450	9.5	170	130	1.4	37	25	10	36
HLM36121838	15.0	80	58	1.7	39	25	10	17
HLM40121398	7.0	590	420	1.3	43	25	10	84
HLM40121853	14.0	173	120	1.8	44	25	10	24
HLM40122034	20.0	70	50	2.0	45	25	10	13
HLM40171660	11.0	300	220	1.6	44	27	10	42
HLM40171835	15.0	103	85	2.0	44	27	10	20
HLM40172233	22.0	92	63	2.2	47	30	10	13
HLM40201660	10.0	355	270	1.6	44	28	10	46
HLM40251945	14.0	250	185	1.9	46	33	10	30
HLM50151483	9.0	573	430	1.4	52	25	10	72
HLM50151869	13.0	400	270	1.8	52	27	10	40
HLM50152040	17.0	133	100	2.0	53	30	10	18
HLM50201770	11.0	540	400	1.7	53	34	10	50
HLM50251960	13.0	500	360	1.9	55	39	10	40



For safety and the proper usage, y	you are requested to approve ou	r product specifications or to	transact the approval
sheet for product specification be	fore ordering. This catalog and it	ts contents are subject to cha	ange without notice

Part Name	Rated Current (A)	Inductance L (µH) ± 25%		Wire	Dimensions (mm)			Rdc
		at 0 A	at Rated Current	Diameter Φ (mm)	A Max	B Max	C ±5	(mΩ) Max
HLM55181875	13.0	650	450	1.8	60	30	10	48
HLM55182063	16.0	460	300	2.0	62	32	10	34
HLM55182450	22.0	290	180	2.4	63	33	10	20
HLM5518212P33	35.0	125	75	2.1×2P	65	35	10	9
HLM65162198	15.0	755	470	2.1	72	30	10	46
HLM65162370	20.0	385	240	2.3	73	34	10	27
HLM6516202P50	30.0	200	120	2.0×2P	75	34	10	13
HLM6516222P36	40.0	100	60	2.2×2P	76	34	10	8
HLM654018110	11.0	2300	1600	1.8	72	60	10	115

Standard Specification

: Class F (155 °C) Insulation grade

Temperature rise : Rated Current is DC current value that ΔT becomes 40deg.

Operating temperature range : -40 °C ~ 155 °C (including self temperature rise)

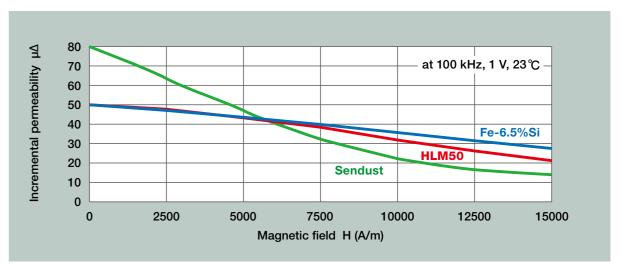


Fig1. Incremental permeability - Magnetic field

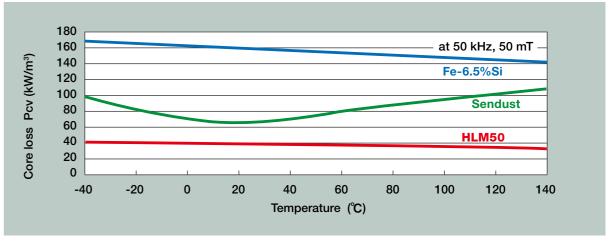


Fig2. Core loss - Temperature



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