



HCPI050 SERIES HIGH CURRENT INDUCTOR



COTS+

ELECTRICAL SPECIFICATIONS

- Temperature Rise @ Rated Current: ≤ 40°C
Operating Temperature: -55°C to +125°C
Standard Tolerance: 20%
Saturation Current (I_sat) will cause initial inductance drop approximate 20%
All test data is referenced @ 25°C ambient

FEATURES

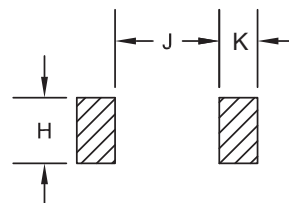
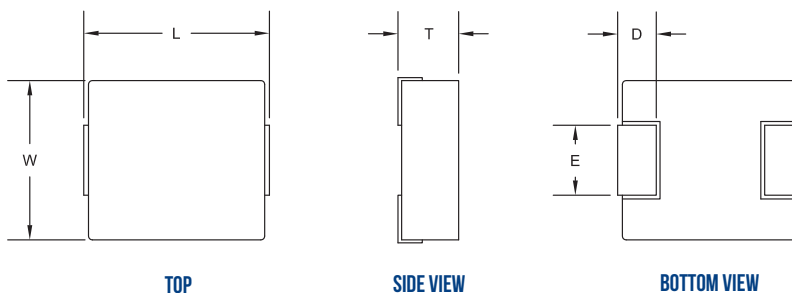
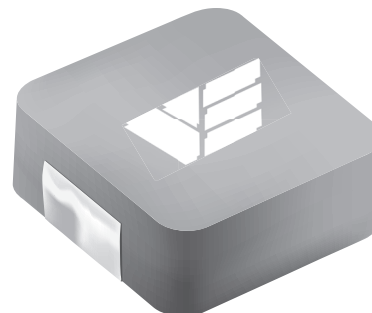
- Molded Construction
Magnetically Shielded
Composite Core
Low DCR
Excellent efficiency
Superior ability to handle transients
High current carrying capacity
Terminations: Tin-lead/RoHS

APPLICATIONS

- Output/Input Chokes
Low profile power supplies
Ideal for Battery/Portable power
DC/DC power supplies
High current POL

Table with 3 columns: Inductance Range (uH), DCR max (mOhms), Current Rating (A). Values: 0.1 to 15, 3.16 to 265, 1.5 to 15.5

ALL DIMENSIONS: INCHES



RECOMMENDED MOUNTING PAD

Table with 9 columns: Size, L, W, T max, D, E, H ref., J ref., K ref. and 5 rows of data for sizes HCPI051 through HCPI055.

CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types





Vanguard P/N	Inductance @ 0A ±20% (µH)	DCR (mOhms)		Rated Current (A _{DC})	Saturation Current (I _{sat})	Size
		Typ	Max			
HCPI-051T1-R22MS-**-*	0.22	5.5	6.7	10.7	14	HCPI051
HCPI-051T1-R47MS-**-*	0.47	13.6	15.8	7	11	HCPI051
HCPI-051T1-R68MS-**-*	0.68	21.5	24.5	6	9	HCPI051
HCPI-051T1-1R0MS-**-*	1	26	30	5	6	HCPI051
HCPI-051T1-1R2MS-**-*	1.2	33	40	4.5	5.5	HCPI051
HCPI-051T1-2R2MS-**-*	2.2	65	75	3.5	4	HCPI051
HCPI-051T1-3R3MS-**-*	3.3	75	86	3	3.8	HCPI051
HCPI-051T1-4R7MS-**-*	4.7	100	115	2.5	3.2	HCPI051
HCPI-051T1-100MS-**-*	10	335	385	1.5	1.8	HCPI051
HCPI-052T1-R33MS-**-*	0.33	8.5	9.8	9.0	16.0	HCPI052
HCPI-052T1-R47MS-**-*	0.47	12.0	13.8	8.0	15.0	HCPI052
HCPI-052T1-R68MS-**-*	0.68	14.0	16.2	7.0	13.0	HCPI052
HCPI-052T1-1R0MS-**-*	1.0	22.0	25.3	6.0	7.5	HCPI052
HCPI-052T1-1R5MS-**-*	1.5	39.0	45.0	4.5	7.0	HCPI052
HCPI-052T1-2R2MS-**-*	2.2	45.0	52.0	4.0	6.0	HCPI052
HCPI-052T1-3R3MS-**-*	3.3	62.0	72.0	3.2	4.5	HCPI052
HCPI-052T1-4R7MS-**-*	4.7	103	118	2.7	4.0	HCPI052
HCPI-052T1-6R8MS-**-*	6.8	142	171	2.3	3.0	HCPI052
HCPI-052T1-8R2MS-**-*	8.2	175	210	2.1	2.6	HCPI052
HCPI-052T1-100MS-**-*	10.0	210	235	2.0	2.3	HCPI052
HCPI-052X2-1R0MS-**-*	1.0	20.0	23.0	6.5	9.0	HCPI052
HCPI-052X2-2R2MS-**-*	2.2	58.0	64.0	3.3	6.0	HCPI052
HCPI-052X2-4R7MS-**-*	4.7	95.0	106	3.0	4.0	HCPI052
HCPI-052X2-100MS-**-*	10.0	153	170	2.0	3.0	HCPI052
HCPI-053M2-R22MS-**-*	0.22	4.9	5.2	15.0	18.7	HCPI053
HCPI-053M2-R33MS-**-*	0.33	7.6	8.2	12.0	21.3	HCPI053
HCPI-053M2-R47MS-**-*	0.47	8.1	8.8	11.5	17.9	HCPI053
HCPI-053M2-R68MS-**-*	0.68	11.2	12.4	10.0	12.8	HCPI053

Inductance measured at 100 kHz, 0.25 V

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HCPI050 SERIES







Vanguard P/N	Inductance @ 0A ±20% (uH)	DCR (mOhms)		Rated Current (A _{DC})	Saturation Current (I _{sat})	Size
		Typ	Max			
HCPI-053M2-R82MS-**-*	0.82	15.1	16.6	8.0	13.2	HCPI053
HCPI-053M2-1R0MS-**-*	1.0	18.9	20.0	7.0	13.7	HCPI053
HCPI-053M2-1R5MS-**-*	1.5	30.0	35.0	5.5	11.5	HCPI053
HCPI-053M2-2R2MS-**-*	2.2	45.6	50.1	4.2	10.7	HCPI053
HCPI-053M2-3R3MS-**-*	3.3	79.2	85.5	3.3	7.3	HCPI053
HCPI-053M2-4R7MS-**-*	4.7	108	116.6	2.8	4.3	HCPI053
HCPI-053M2-5R6MS-**-*	5.6	113	122	2.5	3.9	HCPI053
HCPI-053M2-6R8MS-**-*	6.8	139	150	2.4	3.7	HCPI053
HCPI-053M2-8R2MS-**-*	8.2	160	174	2.3	3.5	HCPI053
HCPI-053M2-100MS-**-*	10.0	184	199	2.3	3.4	HCPI053
HCPI-053M2-120MS-**-*	12.0	217	238	2.2	3.3	HCPI053
HCPI-053V1-R10MS-**-*	0.1	3.6	3.9	17	45	HCPI053
HCPI-053V1-R33MS-**-*	0.33	7.6	8.2	12	25	HCPI053
HCPI-053V1-R47MS-**-*	0.47	8.1	8.8	11.5	21	HCPI053
HCPI-053V1-1R0MS-**-*	1	18.9	20	7	16	HCPI053
HCPI-053V1-2R2MS-**-*	2.2	45.6	50.1	4.2	12.5	HCPI053
HCPI-053V1-3R3MS-**-*	3.3	79.2	85.5	3.3	8.5	HCPI053
HCPI-053V1-4R7MS-**-*	4.7	108	116.6	2.8	5	HCPI053
HCPI-053V1-5R6MS-**-*	5.6	113	122	2.5	4.5	HCPI053
HCPI-053V1-6R8MS-**-*	6.8	139	150	2.4	4.3	HCPI053
HCPI-053V1-100MS-**-*	10	184	199	2.3	4	HCPI053
HCPI-053V2-2R2MS-**-*	2.2	34.9	37.7	5	5.5	HCPI053
HCPI-053V2-3R3MS-**-*	3.3	53.5	57.8	4.1	4.7	HCPI053
HCPI-053V2-100MS-**-*	10	169.3	182.8	2.2	2	HCPI053
HCPI-054X1-R68MS-**-*	0.68	11.0	12.0	8.5	14.0	HCPI054
HCPI-054X1-1R0MS-**-*	1.0	13.0	14.0	7.0	11.0	HCPI054
HCPI-054X1-1R2MS-**-*	1.2	15.0	16.0	6.5	10.5	HCPI054
HCPI-054X1-1R5MS-**-*	1.5	20.0	25.0	6.0	10.0	HCPI054

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Vanguard P/N	Inductance @ 0A ±20% (µH)	DCR (mOhms)		Rated Current (A _{DC})	Saturation Current (I _{sat})	Size
		Typ	Max			
HCPI-054X1-2R2MS-**-*	2.2	29.0	35.0	5.5	9.0	HCPI054
HCPI-054X1-3R3MS-**-*	3.3	32.0	38.0	5.0	7.0	HCPI054
HCPI-054X2-R22MS-**-*	0.22	3.5	3.9	21	14.5	HCPI054
HCPI-054X2-R35MS-**-*	0.35	4.5	5	16.5	9	HCPI054
HCPI-054X2-R47MS-**-*	0.47	7.4	8.5	13	12	HCPI054
HCPI-054X2-R68MS-**-*	0.68	11	12	8.5	14	HCPI054
HCPI-054X2-1R0MS-**-*	1	13	14	7	11	HCPI054
HCPI-054X2-1R2MS-**-*	1.2	15	16	6.5	11	HCPI054
HCPI-054X2-1R5MS-**-*	1.5	20	25	6	10	HCPI054
HCPI-054X2-2R2MS-**-*	2.2	29	35	5.5	9	HCPI054
HCPI-054X2-3R3MS-**-*	3.3	34	38	5	7	HCPI054
HCPI-055V1-R10MS-**-*	0.1	3	3.16	23	27	HCPI055
HCPI-055V1-R22MS-**-*	0.22	4.3	4.52	15.5	21	HCPI055
HCPI-055V1-R33MS-**-*	0.33	5.3	5.56	13.7	19	HCPI055
HCPI-055V1-R47MS-**-*	0.47	6.7	7.04	12.2	16	HCPI055
HCPI-055V1-R68MS-**-*	0.68	8.53	8.96	10.2	13.5	HCPI055
HCPI-055V1-R82MS-**-*	0.82	11.3	11.9	9.3	13	HCPI055
HCPI-055V1-1R0MS-**-*	1	13.1	13.7	9.2	12	HCPI055
HCPI-055V1-1R5MS-**-*	1.5	19.7	20.7	7.2	11	HCPI055
HCPI-055V1-2R2MS-**-*	2.2	27.8	29.2	5.8	10	HCPI055
HCPI-055V1-3R3MS-**-*	3.3	52.1	54.7	5	8.5	HCPI055
HCPI-055V1-4R7MS-**-*	4.7	73.8	77.5	3.5	8.2	HCPI055
HCPI-055V1-5R6MS-**-*	5.6	103	108	3	4.1	HCPI055
HCPI-055V1-100MS-**-*	10	152	158	2.5	4	HCPI055
HCPI-055V1-150MS-**-*	15	252	265	1.9	2.5	HCPI055
HCPI-055V2-1R0MS-**-*	1	10	11	10	6.5	HCPI055
HCPI-055V2-1R5MS-**-*	1.5	17.1	18.5	7.5	7	HCPI055
HCPI-055V2-2R2MS-**-*	2.2	22.5	25	6.75	5.5	HCPI055

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DATA TABLE

Vanguard P/N	Inductance @ 0A ±20% (uH)	DCR (mOhms)		Rated Current (A _{DC})	Saturation Current (I _{sat})	Size
		Typ	Max			
HCPI-055V2-3R3MS-**-*	3.3	36.4	40.4	5.5	7	HCPI055
HCPI-055V2-4R7MS-**-*	4.7	54	60	4.5	5.2	HCPI055
HCPI-055V2-100MS-**-*	10	122.1	131.9	2.75	2.25	HCPI055
HCPI-055V2-220MS-**-*	22	260	270	1.7	1.9	HCPI055
HCPI-055M2-R22MS-**-*	0.22	4.2	4.5	15	21	HCPI055
HCPI-055M2-R47MS-**-*	0.47	6.4	7	12.5	17	HCPI055
HCPI-055M2-R68MS-**-*	0.68	10	12	8.5	14	HCPI055
HCPI-055M2-R80MS-**-*	0.8	5.14	5.65	13	18.5	HCPI055
HCPI-055M2-1R0MS-**-*	1	12.6	13.86	7	11	HCPI055
HCPI-055M2-1R2MS-**-*	1.2	15	16	6.5	11	HCPI055
HCPI-055M2-1R5MS-**-*	1.5	20	25	6	10	HCPI055
HCPI-055M2-2R2MS-**-*	2.2	29	35	5.5	9	HCPI055
HCPI-055M2-3R3MS-**-*	3.3	34	38	5	7	HCPI055
HCPI-055M2-4R7MS-**-*	4.7	59	64.9	3.5	4.1	HCPI055

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VE PART NUMBER STRUCTURE KEY

EXAMPLE: HCPI-051T1-R22MS-1-T

INDUCTANCE
(uH)

0.22
R22

*R = Decimal point

10u = 10R

TOLERANCE
(%)

M	± 20
P	± 25

TERMINATION

S	SnPb
R	RoHS

RELIABILITY

1	COTS/EM
2	Group A
3	TBA

PACKAGING
(Default Tape and Reel)

T	Tape and Reel
B	Bulk

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