



HCPI 100 SERIES

HIGH CURRENT INDUCTOR



COTS+

ELECTRICAL SPECIFICATIONS

- Temperature Rise @ Rated Current: $\leq 40^{\circ}\text{C}$
- Operating Temperature: -55°C to $+125^{\circ}\text{C}$
- Standard Tolerance: 20%
- Saturation Current (I_{sat}) will cause initial inductance drop approximate 20%
- All test data is referenced @ 25°C ambient

FEATURES

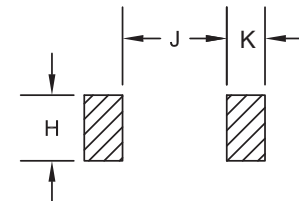
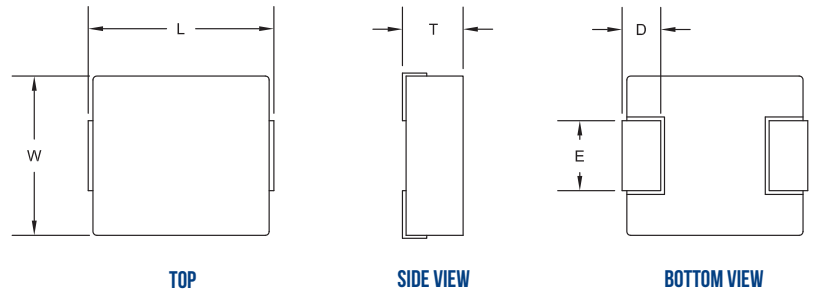
- Molded Construction
- Magnetically Shielded
- Composite Core
- Low DCR
- Excellent efficiency
- Superior ability to handle transients
- High current carrying capacity
- Terminations: Tin-lead/RoHS

APPLICATIONS

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

Inductance Range (μH)	DCR max (mOhms)	Current Rating (A)
0.19 to 15	0.42 to 45	6 to 40

ALL DIMENSIONS: INCHES



RECOMMENDED MOUNTING PAD

Size	L max	W	T max	D	E	H ref.	J ref.	K ref.
HCPI101	0.453	0.394 ± 0.012	0.157	0.087 ± 0.012	0.098-0.138	0.157	0.236	0.138
HCPI102	0.453	0.394 ± 0.012	0.157	0.087 ± 0.012	0.098-0.138	0.161	0.213	0.161

CUSTOM DESIGNS & MODIFICATIONS:

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





Vanguard P/N	Inductance @ 0A ±20% (uH)	DCR (mOHMS)		Rated Current (A _{DC})	Saturation Current (I _{sat})	Size
		Typ	Max			
HCPI-101S1-R19MS-**-*	0.19	0.7	0.8	40	80	HCPI101
HCPI-101S1-R22MS-**-*	0.22	0.875	0.962	35	68	HCPI101
HCPI-101S1-R36MS-**-*	0.36	1.1	1.15	24	30	HCPI101
HCPI-101S1-R47MS-**-*	0.47	1.53	1.68	30	30	HCPI101
HCPI-101S1-R56MS-**-*	0.56	1.3	1.43	25	30	HCPI101
HCPI-101S1-1R0MS-**-*	1	2.7	2.9	21	30	HCPI101
HCPI-101S1-1R5MS-**-*	1.5	3.8	4.2	16	23	HCPI101
HCPI-101S1-2R2MS-**-*	2.2	6.7	7.1	12	17	HCPI101
HCPI-101S1-3R3MS-**-*	3.3	10.8	11.8	10	12	HCPI101
HCPI-101S1-100MS-**-*	10	27	31	7	8	HCPI101
HCPI-101S1-150MS-**-*	15	40	45	6.25	7	HCPI101
HCPI-101M1-R16MS-**-*	0.16	0.42	0.462	40	70	HCPI101
HCPI-101M1-R22MS-**-*	0.22	0.875	0.962	35	68	HCPI101
HCPI-101M1-R30MS-**-*	0.3	1	1.2	25	50	HCPI101
HCPI-101M1-R36MS-**-*	0.36	1.1	1.15	30	50	HCPI101
HCPI-101M1-R39MS-**-*	0.39	1.1	1.21	30	60	HCPI101
HCPI-101M1-R68MS-**-*	0.68	1.68	1.9	23	32	HCPI101
HCPI-101M1-R82MS-**-*	0.82	2.05	2.25	25	30	HCPI101
HCPI-101M1-1R0MS-**-*	1	2.7	2.9	21	30	HCPI101
HCPI-101M1-1R5MS-**-*	1.5	4.2	4.5	16	27	HCPI101
HCPI-101M1-4R7MS-**-*	4.7	13	15.2	10	16	HCPI101
HCPI-101M1-150MS-**-*	15	40	45	6.25	7	HCPI101
HCPI-101V1-R19MS-**-*	0.19	0.87	0.95	40	90.0	HCPI101
HCPI-101V1-R36MS-**-*	0.36	1.3	1.4	31.5	60.0	HCPI101
HCPI-101V1-R56MS-**-*	0.56	1.7	1.8	27.5	49.0	HCPI101
HCPI-101V1-1R0MS-**-*	1	3.7	4.1	17.5	36.0	HCPI101
HCPI-101V1-1R5MS-**-*	1.5	5.3	5.8	15	27.5	HCPI101
HCPI-101V1-2R2MS-**-*	2.2	8.2	9	12	25.6	HCPI101

Inductance measured at 100 kHz, 0.25 V

CUSTOM DESIGNS & MODIFICATIONS:

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

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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-101V1-3R3MS-**-*	3.3	10.8	11.8	10	18.6	HCPI101
HCPI-101V1-4R7MS-**-*	4.7	15	16.5	9.5	17.0	HCPI101
HCPI-101V1-5R6MS-**-*	5.6	17.6	19.3	8.5	16.0	HCPI101
HCPI-101V1-6R8MS-**-*	6.8	21.2	23.3	8.0	13.5	HCPI101
HCPI-101V1-100MS-**-*	10	33.2	36.5	6.8	12.0	HCPI101
HCPI-102X1-R15MS-**-*	0.15	0.5	0.65	40	75	HCPI102
HCPI-102X1-R36MS-**-*	0.36	1.05	1.2	30	60	HCPI102
HCPI-102X1-R41MS-**-*	0.41	1.1	1.3	30	60	HCPI102
HCPI-102X1-R45MS-**-*	0.45	1.1	1.3	25	27	HCPI102
HCPI-102X1-R47MS-**-*	0.47	1.6	1.8	26	40	HCPI102
HCPI-102X1-R56MS-**-*	0.56	1.6	1.8	25	40	HCPI102
HCPI-102X1-R68MS-**-*	0.68	2.4	2.7	22	39	HCPI102
HCPI-102X1-R88MS-**-*	0.88	2.7	3.0	20	38	HCPI102
HCPI-102X1-1R0MS-**-*	1.0	2.9	3.3	18	36	HCPI102
HCPI-102X1-1R5MS-**-*	1.5	3.8	4.2	16	33	HCPI102
HCPI-102X1-2R2MS-**-*	2.2	6.6	7.0	12	27	HCPI102
HCPI-102X1-4R7MS-**-*	4.7	15.0	16.5	9.5	17	HCPI102
HCPI-102X1-100MS-**-*	10.0	27.5	30	6	6.0	HCPI102

Inductance measured at 100 kHz, 0.25 V

VE PART NUMBER STRUCTURE KEY

EXAMPLE: HCPI-101-**R19**MS-1-T

INDUCTANCE (uH)

0.19
R19

*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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