



Features

- Magnetically shielded construction
- Compact and thin
- Large Current and Low DCR

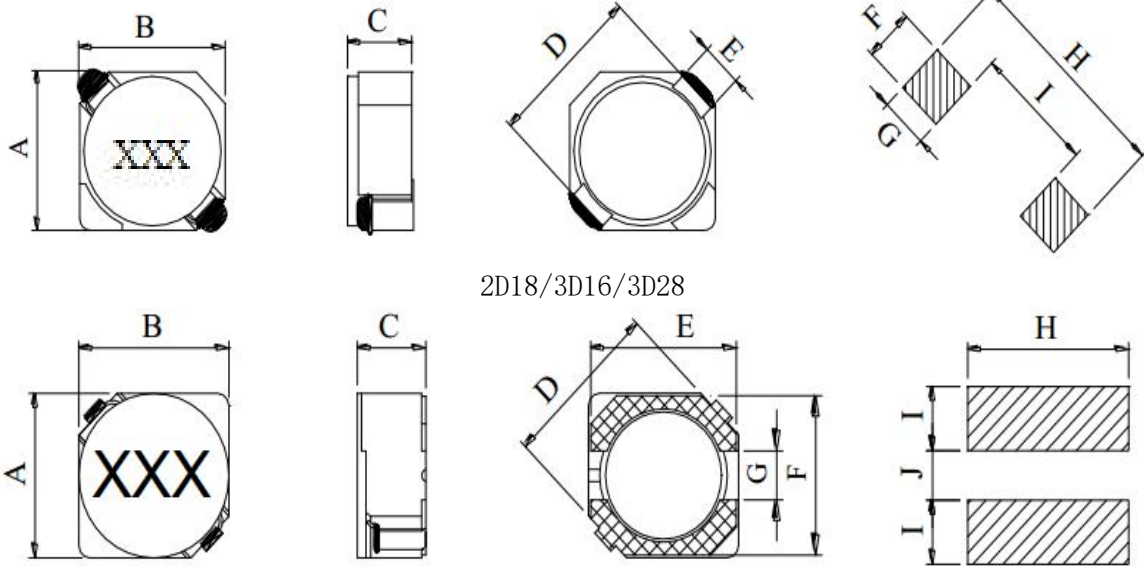
Application

- DC-DC converter of portable equipment. Camcorder, LCD television set, Digital camera, P.D.A., Notebook.

Tolerance

- (K 10%, L 15%, M 20%, N 30%)

Configurations & Dimensions



2D18/3D16/3D28

HC4D18/HC4D22/HC4D18/HC4D22/HC4D28/HC5D18/HC5D28/HC6D18/HD6D28/HC6D38

Dimensions

Chip Size

Units:mm

TYPE	A	B	C	D	E	F	G	H	I	J
HC2D18	3.2max	3.2max	2.0max	3.3	1.0	1.3	1.30	4.30	1.70	
HC3D16	4.0max	4.0max	1.9max	4.4	1.1	1.5	1.40	5.20	2.40	
HC3D28	4.0max	4.0max	3.0max	4.4	1.1	1.5	1.40	5.20	2.40	
HC4D18	5.0max	5.0max	2.0max	6.9max	4.5	4.5	1.50	5.30	1.9	1.5
HC4D22	5.0max	5.0max	2.4max	6.9max	4.5	4.5	1.50	5.30	1.9	1.5
HC4D28	5.0max	5.0max	3.1max	6.9max	4.5	4.5	1.50	5.30	1.9	1.5
HC5D18	5.8±0.3	6.0±0.3	2.2max	8.2max	5.5	5.5	2.00	6.30	2.15	2.0
HC5D28	5.7±0.3	5.7±0.3	3.2max	8.2max	5.5	5.5	2.00	6.30	2.15	2.0
HC6D18	6.7±0.3	6.7±0.3	2.0max	9.5max	6.5	6.5	2.00	7.30	2.65	2.0
HC6D28	6.8±0.3	7.0±0.3	3.2max	9.5max	6.5	6.5	2.00	7.30	2.65	2.0
HC6D38	6.8±0.3	7.0±0.3	4.2max	9.5max	6.5	6.5	2.00	7.30	2.65	2.0

Design as Customer's Requested Specifications.



Speciflcatons HC2D18

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC2D18-1R2N	1.2	30	0.1V/100	0.065	1.07
HC2D18-1R8N	1.8	30	0.1V/100	0.085	0.95
HC2D18-2R2N	2.2	30	0.1V/100	0.065	0.85
HC2D18-3R3N	3.3	30	0.1V/100	0.080	0.75
HC2D18-4R7N	4.7	30	0.1V/100	0.110	0.63
HC2D18-6R8N	6.8	30	0.1V/100	0.160	0.52
HC2D18-100M	10	20	0.1V/100	0.250	0.43
HC2D18-150M	15	20	0.1V/100	0.350	0.35
HC2D18-220M	22	20	0.1V/100	0.500	0.30
HC2D18-330M	33	20	0.1V/100	0.800	0.24
HC2D18-470M	47	20	0.1V/100	1.000	0.20

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcatons HC3D16

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC3D16-1R0N	1.0	30	0.1V/100	0.100	1.50
HC3D16-1R2N	1.2	30	0.1V/100	0.118	0.80
HC3D16-1R5N	1.5	30	0.1V/100	0.195	0.70
HC3D16-2R2N	2.2	30	0.1V/100	0.250	0.50
HC3D16-3R3N	3.3	20	0.1V/100	0.294	0.70
HC3D16-3R9N	3.9	20	0.1V/100	0.294	0.70
HC3D16-4R7N	4.7	20	0.1V/100	0.294	0.70
HC3D16-5R6N	5.6	20	0.1V/100	0.294	0.70
HC3D16-6R8N	6.8	20	0.1V/100	0.294	0.70
HC3D16-8R2N	8.2	20	0.1V/100	0.294	0.70
HC3D16-100M	10	20	0.1V/100	0.294	0.70
HC3D16-120M	12	20	0.1V/100	0.294	0.70
HC3D16-150M	15	20	0.1V/100	0.294	0.70
HC3D16-180M	18	20	0.1V/100	0.294	0.70
HC3D16-220M	22	20	0.1V/100	0.294	0.70
HC3D16-270M	27	20	0.1V/100	0.294	0.70
HC3D16-330M	33	20	0.1V/100	0.294	0.70
HC3D16-390M	39	20	0.1V/100	0.294	0.70
HC3D16-470M	47	20	0.1V/100	1.300	0.45

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC3D28

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC3D28-100M	10	20	0.1V/100	0.18	0.500
HC3D28-120M	12	20	0.1V/100	0.23	0.450
HC3D28-150M	15	20	0.1V/100	0.25	0.400
HC3D28-180M	18	20	0.1V/100	0.28	0.350
HC3D28-220M	22	20	0.1V/100	0.32	0.330
HC3D28-270M	27	20	0.1V/100	0.40	0.290
HC3D28-330M	33	20	0.1V/100	0.50	0.280
HC3D28-390M	39	20	0.1V/100	0.56	0.250
HC3D28-470M	47	20	0.1V/100	0.80	0.230
HC3D28-560M	56	20	0.1V/100	0.85	0.200
HC3D28-680M	68	20	0.1V/100	1.10	0.185
HC3D28-820M	82	20	0.1V/100	1.30	0.172
HC3D28-101M	100	20	0.1V/100	1.50	0.160
HC3D28-121M	120	20	0.1V/100	1.70	0.136
HC3D28-151M	150	20	0.1V/100	2.00	0.124
HC3D28-181M	180	20	0.1V/100	2.50	0.119

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcations HC4D18

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D18-1R0N	1.0	30	0.1V/100	0.034	1.72
HC4D18-2R2N	2.2	30	0.1V/100	0.045	1.32
HC4D18-2R7N	2.7	30	0.1V/100	0.058	1.28
HC4D18-3R3N	3.3	30	0.1V/100	0.070	1.04
HC4D18-3R9N	3.9	30	0.1V/100	0.082	0.88
HC4D18-4R7N	4.7	30	0.1V/100	0.093	0.84
HC4D18-5R6N	5.6	30	0.1V/100	0.112	0.80
HC4D18-6R8N	6.8	30	0.1V/100	0.140	0.76
HC4D18-8R2N	8.2	30	0.1V/100	0.174	0.68
HC4D18-100M	10	20	0.1V/100	0.200	0.61
HC4D18-120M	12	20	0.1V/100	0.229	0.56
HC4D18-150M	15	20	0.1V/100	0.261	0.50
HC4D18-180M	18	20	0.1V/100	0.295	0.48

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC4D18

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D18-220M	22	20	0.1V/100	0.397	0.41
HC4D18-270M	27	20	0.1V/100	0.441	0.35
HC4D18-330M	33	20	0.1V/100	0.525	0.32
HC4D18-390M	39	20	0.1V/100	0.60	0.30
HC4D18-470M	47	20	0.1V/100	0.72	0.28
HC4D18-560M	56	20	0.1V/100	0.83	0.25
HC4D18-680M	68	20	0.1V/100	0.97	0.23
HC4D18-820M	82	20	0.1V/100	1.53	0.21
HC4D18-101M	100	20	0.1V/100	1.68	0.20
HC4D18-121M	120	20	0.1V/100	2.06	0.19
HC4D18-151M	150	20	0.1V/100	2.58	0.17
HC4D18-181M	180	20	0.1V/100	2.95	0.16
HC4D18-221M	220	20	0.1V/100	4.17	0.15
HC4D18-271M	270	20	0.1V/100	4.70	0.13
HC4D18-331M	330	20	0.1V/100	5.37	0.12
HC4D18-391M	390	20	0.1V/100	8.91	0.11

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcations HC4D22

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D22-1R5N	1.5	30	0.1V/100	0.030	2.00
HC4D22-1R8N	1.8	30	0.1V/100	0.045	1.90
HC4D22-2R7N	2.7	30	0.1V/100	0.055	1.80
HC4D22-3R3N	3.3	30	0.1V/100	0.065	1.40
HC4D22-3R9N	3.9	30	0.1V/100	0.075	1.30
HC4D22-4R7N	4.7	30	0.1V/100	0.085	1.10
HC4D22-5R6N	5.6	30	0.1V/100	0.090	1.05
HC4D22-6R8N	6.8	30	0.1V/100	0.10	1.00
HC4D22-8R2N	8.2	30	0.1V/100	0.12	0.90
HC4D22-100M	10	20	0.1V/100	0.14	0.80
HC4D22-120M	12	20	0.1V/100	0.16	0.75
HC4D22-150M	15	20	0.1V/100	0.20	0.68
HC4D22-180M	18	20	0.1V/100	0.23	0.60

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC4D22

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D22-220M	22	20	0.1V/100	0.280	0.54
HC4D22-270M	27	20	0.1V/100	0.330	0.51
HC4D22-330M	33	20	0.1V/100	0.360	0.48
HC4D22-390M	39	20	0.1V/100	0.45	0.43
HC4D22-470M	47	20	0.1V/100	0.55	0.38
HC4D22-560M	56	20	0.1V/100	0.65	0.36
HC4D22-680M	68	20	0.1V/100	0.85	0.33
HC4D22-820M	82	20	0.1V/100	1.00	0.30
HC4D22-101M	100	20	0.1V/100	1.10	0.25

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcations HC4D28

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D28-1R0N	1.0	30	0.1V/100	0.0255	2.56
HC4D28-1R5N	1.5	30	0.1V/100	0.0400	2.38
HC4D28-1R8N	1.8	30	0.1V/100	0.0370	2.20
HC4D28-2R7N	2.7	30	0.1V/100	0.0505	1.60
HC4D28-3R3N	3.3	30	0.1V/100	0.0580	1.57
HC4D28-3R9N	3.9	30	0.1V/100	0.0665	1.44
HC4D28-4R7N	4.7	30	0.1V/100	0.072	1.32
HC4D28-5R6N	5.6	30	0.1V/100	0.080	1.17
HC4D28-6R8N	6.8	30	0.1V/100	0.092	1.12
HC4D28-8R2N	8.2	30	0.1V/100	0.098	1.04
HC4D28-100M	10	20	0.1V/100	0.103	1.00
HC4D28-120M	12	20	0.1V/100	0.128	0.84
HC4D28-150M	15	20	0.1V/100	0.144	0.76
HC4D28-180M	18	20	0.1V/100	0.186	0.72
HC4D28-220M	22	20	0.1V/100	0.218	0.70
HC4D28-270M	27	20	0.1V/100	0.252	0.58
HC4D28-330M	33	20	0.1V/100	0.285	0.56
HC4D28-390M	39	20	0.1V/100	0.408	0.50
HC4D28-470M	47	20	0.1V/100	0.440	0.48
HC4D28-560M	56	20	0.1V/100	0.550	0.41

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC4D22

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC4D28-680M	68	20	0.1V/100	0.62	0.35
HC4D28-820M	82	20	0.1V/100	0.92	0.32
HC4D28-101M	100	20	0.1V/100	1.05	0.29
HC4D28-121M	120	20	0.1V/100	1.55	0.27
HC4D28-151M	150	20	0.1V/100	1.70	0.24
HC4D28-181M	180	20	0.1V/100	1.90	0.22

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcations HC5D18

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC5D18-1R0N	1.0	30	0.1V/100	0.028	3.86
HC5D18-1R2N	1.2	30	0.1V/100	0.036	3.12
HC5D18-1R5N	1.5	30	0.1V/100	0.036	3.12
HC5D18-2R2N	2.2	30	0.1V/100	0.043	2.63
HC5D18-2R7N	2.7	30	0.1V/100	0.051	2.38
HC5D18-3R3N	3.3	30	0.1V/100	0.063	1.95
HC5D18-3R5N	3.5	30	0.1V/100	0.063	1.95
HC5D18-4R7N	4.7	30	0.1V/100	0.072	1.76
HC5D18-5R6N	5.6	30	0.1V/100	0.083	1.60
HC5D18-6R2N	6.2	30	0.1V/100	0.090	1.50
HC5D18-6R8N	6.8	20	0.1V/100	0.102	1.40
HC5D18-8R2N	8.2	20	0.1V/100	0.116	1.25
HC5D18-100M	10	20	0.1V/100	0.124	1.20
HC5D18-120M	12	20	0.1V/100	0.162	1.10
HC5D18-150M	15	20	0.1V/100	0.204	0.97
HC5D18-180M	18	20	0.1V/100	0.226	0.85
HC5D18-220M	22	20	0.1V/100	0.265	0.80
HC5D18-270M	27	20	0.1V/100	0.320	0.75
HC5D18-330M	33	20	0.1V/100	0.380	0.65
HC5D18-390M	39	20	0.1V/100	0.496	0.57
HC5D18-470M	47	20	0.1V/100	0.525	0.54
HC5D18-560M	56	20	0.1V/100	0.795	0.50
HC5D18-680M	68	20	0.1V/100	0.860	0.43
HC5D18-820M	82	20	0.1V/100	0.980	0.41
HC5D18-101M	100	20	0.1V/100	1.250	0.36

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC5D28

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC5D28-1R0N	1.0	30	0.1V/100	0.011	3.50
HC5D28-1R2N	1.2	30	0.1V/100	0.015	3.00
HC5D28-1R8N	1.8	30	0.1V/100	0.018	2.70
HC5D28-2R2N	2.2	30	0.1V/100	0.020	2.60
HC5D28-2R5N	2.5	30	0.1V/100	0.020	2.60
HC5D28-3R0N	3	30	0.1V/100	0.023	2.40
HC5D28-3R3N	3.3	30	0.1V/100	0.030	2.30
HC5D28-4R2N	4.2	30	0.1V/100	0.035	2.20
HC5D28-4R7N	4.7	30	0.1V/101	0.036	2.10
HC5D28-5R3N	5.3	30	0.1V/100	0.038	1.90
HC5D28-5R6N	5.6	30	0.1V/100	0.040	1.85
HC5D28-6R2N	6.2	30	0.1V/100	0.045	1.80
HC5D28-8R2N	8.2	30	0.1V/100	0.053	1.60
HC5D28-100M	10	20	0.1V/100	0.065	1.30
HC5D28-120M	12	20	0.1V/100	0.076	1.20
HC5D28-150M	15	20	0.1V/100	0.103	1.10
HC5D28-180M	18	20	0.1V/100	0.110	1.00
HC5D28-200M	20	20	0.1V/100	0.110	0.94
HC5D28-220M	22	20	0.1V/100	0.112	0.90
HC5D28-270M	27	20	0.1V/100	0.175	0.85
HC5D28-330M	33	20	0.1V/100	0.189	0.75
HC5D28-390M	39	20	0.1V/100	0.212	0.70
HC5D28-470M	47	20	0.1V/100	0.250	0.62
HC5D28-560M	56	20	0.1V/100	0.305	0.58
HC5D28-680M	68	20	0.1V/100	0.355	0.52
HC5D28-820M	82	20	0.1V/100	0.463	0.46
HC5D28-101M	100	20	0.1V/100	0.520	0.42
HC5D28-151M	150	20	0.1V/100	1.00	0.34
HC5D28-181M	18	20	0.1V/100	1.15	0.30
HC5D28-221M	220	20	0.1V/100	1.30	0.28
HC5D28-331M	330	20	0.1V/100	3.00	0.23
HC5D28-471M	470	20	0.1V/100	3.60	0.20

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC6D18

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC6D18-3R3N	3.3	30	0.1V/100	0.050	3.00
HC6D18-6R8N	6.8	30	0.1V/100	0.087	2.20
HC6D18-220M	22	20	0.1V/100	0.396	1.00

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C

Speciflcations HC6D28

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC6D28-2R2N	2.2	30	0.1V/100	0.020	4.00
HC6D28-3R0N	3.0	30	0.1V/100	0.024	3.00
HC6D28-3R3N	3.3	30	0.1V/100	0.024	3.00
HC6D28-3R9N	3.9	30	0.1V/100	0.027	2.60
HC6D28-5R0N	5.0	30	0.1V/100	0.031	2.40
HC6D28-6R0N	6.0	30	0.1V/100	0.035	2.25
HC6D28-6R8N	6.8	30	0.1V/100	0.035	2.20
HC6D28-7R3N	7.3	30	0.1V/100	0.054	2.10
HC6D28-8R6N	8.6	30	0.1V/100	0.058	1.85
HC6D28-100M	10	20	0.1V/100	0.065	1.70
HC6D28-120M	12	20	0.1V/100	0.070	1.55
HC6D28-150M	15	20	0.1V/100	0.084	1.40
HC6D28-180M	18	20	0.1V/100	0.095	1.32
HC6D28-220M	22	20	0.1V/100	0.128	1.20
HC6D28-270M	27	20	0.1V/100	0.142	1.05
HC6D28-330M	33	20	0.1V/100	0.165	0.97
HC6D28-390M	39	20	0.1V/100	0.210	0.86
HC6D28-470M	47	20	0.1V/100	0.238	0.80
HC6D28-560M	56	20	0.1V/100	0.277	0.73
HC6D28-680M	68	20	0.1V/100	0.304	0.65
HC6D28-820M	82	20	0.1V/100	0.390	0.60
HC6D28-101M	100	20	0.1V/100	0.535	0.54

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C



Speciflcations HC6D38

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (KHz)	DCR (Ω) max	Isat (A) max
HC6D38-2R2N	2.2	30	0.1V/100	0.017	3.60
HC6D38-3R3N	3.3	30	0.1V/100	0.020	3.20
HC6D38-3R9N	3.9	30	0.1V/100	0.022	3.00
HC6D38-4R7N	4.7	30	0.1V/100	0.024	2.60
HC6D38-5R0N	5.0	30	0.1V/100	0.024	2.60
HC6D38-5R6N	5.6	30	0.1V/100	0.027	2.40
HC6D38-6R2N	6.2	30	0.1V/100	0.027	2.30
HC6D38-6R8N	6.8	30	0.1V/100	0.031	2.30
HC6D38-7R4N	7.4	30	0.1V/100	0.031	2.10
HC6D38-8R7N	8.7	30	0.1V/101	0.034	2.00
HC6D38-100M	10	20	0.1V/100	0.044	1.80
HC6D38-120M	12	20	0.1V/100	0.053	1.70
HC6D38-150M	15	20	0.1V/100	0.057	1.45
HC6D38-180M	18	30	0.1V/100	0.092	1.40
HC6D38-220M	22	20	0.1V/100	0.096	1.20
HC6D38-270M	27	20	0.1V/100	0.109	1.10
HC6D38-330M	33	20	0.1V/100	0.124	1.00
HC6D38-390M	39	20	0.1V/100	0.138	0.95
HC6D38-470M	47	20	0.1V/100	0.155	0.85
HC6D38-560M	56	20	0.1V/100	0.202	0.75
HC6D38-680M	68	20	0.1V/100	0.234	0.70
HC6D38-820M	82	20	0.1V/100	0.324	0.62
HC6D38-101M	100	20	0.1V/100	0.358	0.58
HC6D38-221M	220	20	0.1V/100	1.000	0.35
HC6D38-331M	330	20	0.1V/100	1.400	0.30

Note: Isat:Based on inductance change ($\Delta L/L_0 \leq 35\%$)@ambient temp. 25°C