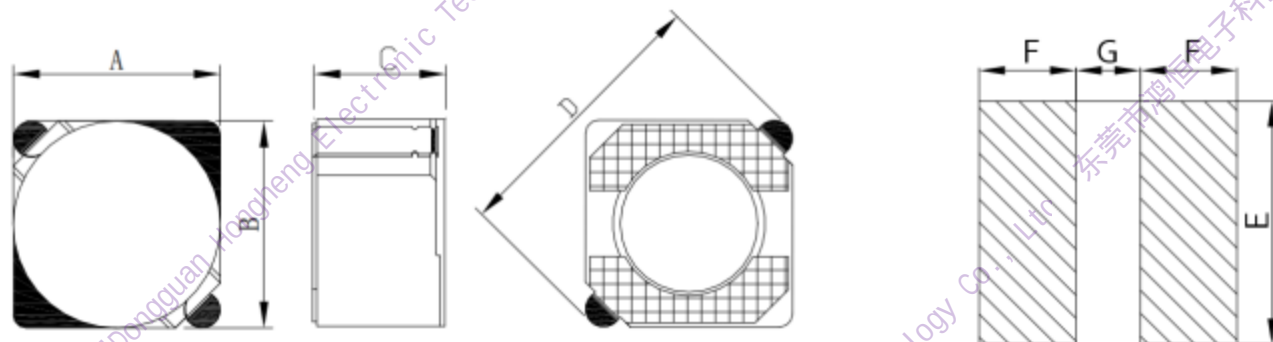


Features:

- A wide range of product line up is available to meet the various requirements.
- For DC/DC converter applications.
- Ideally used in thin-screen TV, LCDs, AV equipment and other electronic devices.
- Custom design is also available.
- RoHS compliant.

Appearance dimensions (mm, dimensions without tolerance are typical):

Recommended Land Patterns



Type	A	B	C	D	E	F	G	MPQ(pcs)
CDRH3D16	4.2 Max.	4.2 Max.	1.8 Max.	5.5 Max.	4.6	1.65	1.0	3000
CDRH3D18	4.2 Max.	4.2 Max.	2.1 Max.	5.5 Max.	4.6	1.65	1.0	1000
CDRH3D28	4.2 Max.	4.2 Max.	3.2 Max.	5.5 Max.	4.6	1.65	1.0	500
CDRH4D18	5.0 Max.	5.0 Max.	2.0 Max.	6.9 Max.	5.3	1.90	1.5	1000
CDRH4D22	5.0 Max.	5.0 Max.	2.4 Max.	6.9 Max.	5.3	1.90	1.5	2000
CDRH4D28	5.0 Max.	5.0 Max.	3.0 Max.	6.9 Max.	5.3	1.90	1.5	500
CDRH5D28	6.0 Max.	6.0 Max.	3.0 Max.	8.2 Max.	6.3	2.15	2.0	2000
CDRH5D33	6.0 Max.	6.0 Max.	3.5 Max.	8.2 Max.	6.3	2.15	2.0	2000
CDRH6D18	7.0 Max.	7.0 Max.	2.0 Max.	9.5 Max.	7.3	2.65	2.0	2000
CDRH6D28	7.0 Max.	7.0 Max.	3.0 Max.	9.5 Max.	7.3	2.65	2.0	1500
CDRH6D38	7.0 Max.	7.0 Max.	4.0 Max.	9.5 Max.	7.3	2.65	2.0	1000

CDRH3D16 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH3D16-1R5N	1.50	30%	53.00	1.550	1.938	2.200	2.800
CDRH3D16-2R2N	2.20	30%	75.00	1.200	1.500	1.700	2.100
CDRH3D16-3R3N	3.30	30%	85.00	1.100	1.375	1.600	2.000
CDRH3D16-4R7N	4.70	30%	105.0	0.900	1.125	1.300	1.600
CDRH3D16-6R8N	6.80	30%	170.0	0.700	0.875	1.000	1.300
CDRH3D16-100M	10.0	20%	210.0	0.550	0.688	0.800	1.000

CDRH3D16 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH3D16-150M	15.0	20%	295.0	0.450	0.563	0.600	0.800
CDRH3D16-220M	22.0	20%	430.0	0.400	0.500	0.600	0.800
CDRH3D16-330M	33.0	20%	660.0	0.350	0.438	0.500	0.600
CDRH3D16-151K	150.0	10%	3210	0.180	0.225	0.300	0.400
CDRH3D16-221K	220.0	10%	5200	0.160	0.200	0.200	0.300
CDRH3D16-331K	330.0	10%	6800	0.140	0.175	0.200	0.300

CDRH3D18 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH3D18-3R3M	3.30	20%	105	1.600	2.000	2.300	2.900
CDRH3D18-4R7M	4.70	20%	137	1.350	1.688	1.900	2.400
CDRH3D18-6R8M	6.80	20%	170	1.100	1.375	1.600	2.000
CDRH3D18-100M	10.0	20%	265	0.900	1.125	1.300	1.600
CDRH3D18-150M	15.0	20%	379	0.750	0.938	1.100	1.400
CDRH3D18-220M	22.0	20%	590	0.600	0.750	0.900	1.100
CDRH3D18-330M	33.0	20%	895	0.450	0.563	0.600	0.800
CDRH3D18-470M	47.0	20%	1390	0.350	0.438	0.500	0.600

CDRH3D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH3D28-3R3N	3.30	30%	72.50	1.800	2.250	2.600	3.300
CDRH3D28-4R7N	4.70	30%	88.50	1.500	1.875	2.200	2.800
CDRH3D28-6R8N	6.80	30%	120.0	1.250	1.563	1.800	2.300
CDRH3D28-100M	10.0	20%	145.0	1.000	1.250	1.400	1.800
CDRH3D28-150M	15.0	20%	215.0	0.900	1.125	1.300	1.600
CDRH3D28-220M	22.0	20%	335.0	0.700	0.875	1.000	1.300
CDRH3D28-330M	33.0	20%	480.0	0.550	0.688	0.800	1.000
CDRH3D28-470M	47.0	20%	595.0	0.450	0.563	0.600	0.800
CDRH3D28-101M	100.0	20%	1140	0.400	0.500	0.600	0.800

CDRH4D18 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH4D18-1R2N	1.20	30%	45.0	1.730	2.163	2.500	3.100
CDRH4D18-2R2N	2.20	30%	75.0	1.310	1.638	1.900	2.400
CDRH4D18-2R7N	2.70	30%	105	1.280	1.600	1.800	2.300
CDRH4D18-3R3N	3.30	30%	110	1.050	1.313	1.500	1.900
CDRH4D18-3R9N	3.90	30%	155	0.880	1.100	1.300	1.600
CDRH4D18-4R7N	4.70	30%	165	0.830	1.038	1.200	1.500
CDRH4D18-5R6N	5.60	30%	170	0.800	1.000	1.200	1.500
CDRH4D18-6R8N	6.80	30%	180	0.760	0.950	1.100	1.400
CDRH4D18-8R2N	8.20	30%	190	0.680	0.850	1.000	1.300
CDRH4D18-100M	10.0	20%	200	0.600	0.750	0.900	1.100
CDRH4D18-120M	12.0	20%	210	0.560	0.700	0.800	1.000
CDRH4D18-150M	15.0	20%	240	0.500	0.625	0.700	0.900
CDRH4D18-180M	18.0	20%	340	0.480	0.600	0.700	0.900
CDRH4D18-220M	22.0	20%	395	0.400	0.500	0.600	0.800
CDRH4D18-270M	27.0	20%	440	0.350	0.438	0.500	0.600
CDRH4D18-330M	33.0	20%	694	0.320	0.400	0.500	0.600
CDRH4D18-390M	39.0	20%	710	0.300	0.375	0.400	0.500
CDRH4D18-470M	47.0	20%	925	0.280	0.350	0.400	0.500
CDRH4D18-560M	56.0	20%	1080	0.260	0.325	0.400	0.500
CDRH4D18-680M	68.0	20%	1300	0.250	0.313	0.400	0.500
CDRH4D18-820M	82.0	20%	1560	0.220	0.275	0.300	0.400
CDRH4D18-101M	100.0	20%	1730	0.200	0.250	0.300	0.400
CDRH4D18-121M	120.0	20%	2390	0.180	0.225	0.300	0.400
CDRH4D18-151M	150.0	20%	2670	0.150	0.188	0.200	0.300
CDRH4D18-181M	180.0	20%	4000	0.130	0.163	0.200	0.300

CDRH4D22 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH4D22-1R2N	1.20	30%	26.50	4.200	5.250	6.000	7.500
CDRH4D22-1R5N	1.50	30%	31.50	3.500	4.375	5.000	6.300
CDRH4D22-2R2N	2.20	30%	44.00	3.200	4.000	4.600	5.800
CDRH4D22-2R7N	2.70	30%	57.80	2.800	3.500	4.000	5.000
CDRH4D22-3R5N	3.50	30%	65.00	2.500	3.125	3.600	4.500

CDRH4D22 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH4D22-4R7N	4.70	30%	82.80	2.200	2.750	3.200	4.000
CDRH4D22-5R2N	5.20	30%	92.80	2.050	2.563	2.900	3.600
CDRH4D22-6R3N	6.30	30%	110.0	1.850	2.313	2.700	3.400
CDRH4D22-8R2N	8.20	30%	128.5	1.650	2.063	2.400	3.000
CDRH4D22-100M	10.0	20%	160.0	1.500	1.875	2.200	2.800
CDRH4D22-120M	12.0	20%	187.0	1.270	1.588	1.800	2.300
CDRH4D22-150M	15.0	20%	213.0	1.150	1.438	1.700	2.100
CDRH4D22-180M	18.0	20%	238.5	1.100	1.375	1.600	2.000
CDRH4D22-220M	22.0	20%	267.0	1.050	1.313	1.500	1.900
CDRH4D22-270M	27.0	20%	394.0	0.900	1.125	1.300	1.600
CDRH4D22-330M	33.0	20%	448.5	0.800	1.000	1.200	1.500
CDRH4D22-390M	39.0	20%	668.0	0.750	0.938	1.100	1.400
CDRH4D22-470M	47.0	20%	725.0	0.700	0.875	1.000	1.300
CDRH4D22-560M	56.0	20%	810.0	0.650	0.813	0.900	1.100
CDRH4D22-680M	68.0	20%	913.0	0.600	0.750	0.900	1.100
CDRH4D22-820M	82.0	20%	1220	0.550	0.688	0.800	1.000
CDRH4D22-101M	100.0	20%	1370	0.480	0.600	0.700	0.900

CDRH4D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH4D28-1R2N	1.20	30%	23.50	2.560	3.200	3.700	4.600
CDRH4D28-1R8N	1.80	30%	27.50	2.200	2.750	3.200	4.000
CDRH4D28-2R2N	2.20	30%	31.50	2.050	2.563	2.900	3.600
CDRH4D28-2R7N	2.70	30%	43.30	1.600	2.000	2.300	2.900
CDRH4D28-3R3N	3.30	30%	49.30	1.550	1.938	2.200	2.800
CDRH4D28-3R9N	3.90	30%	64.80	1.450	1.813	2.100	2.600
CDRH4D28-4R7N	4.70	30%	72.00	1.300	1.625	1.900	2.400
CDRH4D28-5R6N	5.60	30%	101.0	1.180	1.475	1.700	2.100
CDRH4D28-6R8N	6.80	30%	109.0	1.130	1.413	1.600	2.000
CDRH4D28-8R2N	8.20	30%	117.5	1.050	1.313	1.500	1.900
CDRH4D28-100M	10.0	20%	128.3	1.000	1.250	1.400	1.800
CDRH4D28-120M	12.0	20%	131.6	0.850	1.063	1.200	1.500
CDRH4D28-150M	15.0	20%	149.0	0.760	0.950	1.100	1.400

CDRH4D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH4D28-180M	18.0	20%	166.0	0.720	0.900	1.000	1.300
CDRH4D28-220M	22.0	20%	235.0	0.700	0.875	1.000	1.300
CDRH4D28-270M	27.0	20%	261.0	0.580	0.725	0.800	1.000
CDRH4D28-330M	33.0	20%	331.3	0.560	0.700	0.800	1.000
CDRH4D28-390M	39.0	20%	383.7	0.500	0.625	0.700	0.900
CDRH4D28-470M	47.0	20%	587.0	0.480	0.600	0.700	0.900
CDRH4D28-560M	56.0	20%	624.5	0.400	0.500	0.600	0.800
CDRH4D28-680M	68.0	20%	699.0	0.350	0.438	0.500	0.600
CDRH4D28-820M	82.0	20%	914.8	0.320	0.400	0.500	0.600
CDRH4D28-101M	100.0	20%	1020	0.290	0.363	0.400	0.500
CDRH4D28-121M	120.0	20%	1270	0.270	0.338	0.400	0.500
CDRH4D28-151M	150.0	20%	1350	0.240	0.300	0.300	0.400
CDRH4D28-181M	180.0	20%	1540	0.220	0.275	0.300	0.400

CDRH5D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH5D28-2R2N	2.20	30%	18.00	2.600	3.250	3.700	4.600
CDRH5D28-3R3N	3.30	30%	24.00	2.400	3.000	3.500	4.400
CDRH5D28-4R7N	4.70	30%	38.00	2.200	2.750	3.200	4.000
CDRH5D28-5R6N	5.60	30%	45.00	1.800	2.250	2.600	3.300
CDRH5D28-6R8N	6.80	30%	50.00	1.700	2.125	2.400	3.000
CDRH5D28-8R2N	8.20	30%	53.00	1.600	2.000	2.300	2.900
CDRH5D28-100M	10.0	20%	65.00	1.300	1.625	1.900	2.400
CDRH5D28-120M	12.0	20%	76.00	1.200	1.500	1.700	2.100
CDRH5D28-150M	15.0	20%	105.0	1.100	1.375	1.600	2.000
CDRH5D28-180M	18.0	20%	110.0	1.000	1.250	1.400	1.800
CDRH5D28-220M	22.0	20%	125.0	0.900	1.125	1.300	1.600
CDRH5D28-270M	27.0	20%	175.0	0.850	1.063	1.200	1.500
CDRH5D28-330M	33.0	20%	190.0	0.750	0.938	1.100	1.400
CDRH5D28-390M	39.0	20%	212.0	0.700	0.875	1.000	1.300
CDRH5D28-470M	47.0	20%	250.0	0.630	0.788	0.900	1.100
CDRH5D28-560M	56.0	20%	305.0	0.580	0.725	0.800	1.000
CDRH5D28-680M	68.0	20%	355.0	0.520	0.650	0.700	0.900

CDRH5D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH5D28-820M	82.0	20%	463.0	0.460	0.575	0.700	0.900
CDRH5D28-101M	100.0	20%	520.0	0.420	0.525	0.600	0.800

CDRH5D33 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH5D33-2R2N	2.20	30%	33.00	3.500	4.375	5.000	6.300
CDRH5D33-4R7N	4.70	30%	47.00	3.210	4.013	4.600	5.800
CDRH5D33-6R8N	6.80	30%	75.00	2.800	3.500	4.000	5.000
CDRH5D33-8R2N	8.20	30%	88.00	2.400	3.000	3.500	4.400
CDRH5D33-100M	10.0	20%	100.0	2.000	2.500	2.900	3.600
CDRH5D33-220M	22.0	20%	155.0	1.400	1.750	2.000	2.500
CDRH5D33-330M	33.0	20%	222.0	1.200	1.500	1.700	2.100
CDRH5D33-470M	47.0	20%	280.0	1.100	1.375	1.600	2.000
CDRH5D33-560M	56.0	20%	336.0	0.980	1.225	1.400	1.800
CDRH5D33-680M	68.0	20%	415.0	0.820	1.025	1.200	1.500
CDRH5D33-820M	82.0	20%	525.0	0.650	0.813	0.900	1.100
CDRH5D33-101M	100.0	20%	635.0	0.450	0.563	0.600	0.800

CDRH6D18 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH6D18-1R2N	1.20	30%	23.10	5.500	6.875	7.900	9.900
CDRH6D18-1R8N	1.80	30%	35.80	4.510	5.638	6.500	8.100
CDRH6D18-2R7N	2.70	30%	44.30	3.600	4.500	5.200	6.500
CDRH6D18-3R9N	3.90	30%	62.40	3.020	3.775	4.300	5.400
CDRH6D18-4R7N	4.70	30%	73.20	2.800	3.500	4.000	5.000
CDRH6D18-6R8N	6.80	30%	102.0	2.350	2.938	3.400	4.300
CDRH6D18-8R2N	8.20	30%	122.0	2.100	2.625	3.000	3.800
CDRH6D18-100M	10.0	20%	156.0	1.950	2.438	2.800	3.500
CDRH6D18-150M	15.0	20%	237.0	1.600	2.000	2.300	2.900
CDRH6D18-220M	22.0	20%	275.0	1.350	1.688	1.900	2.400
CDRH6D18-330M	33.0	20%	467.0	1.100	1.375	1.600	2.000
CDRH6D18-470M	47.0	20%	668.0	0.900	1.125	1.300	1.600
CDRH6D18-560M	56.0	20%	756.0	0.850	1.063	1.200	1.500

CDRH6D18 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH6D18-680M	68.0	20%	947.0	0.700	0.875	1.000	1.300
CDRH6D18-820M	82.0	20%	1073	0.650	0.813	0.900	1.100
CDRH6D18-101M	100.0	20%	1212	0.600	0.750	0.900	1.100
CDRH6D18-121M	120.0	20%	1612	0.580	0.725	0.800	1.000

CDRH6D28 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH6D28-3R0N	3.00	30%	25.00	3.000	3.750	4.300	5.400
CDRH6D28-3R9N	3.90	30%	28.00	2.600	3.250	3.700	4.600
CDRH6D28-5R0N	5.00	30%	30.00	2.400	3.000	3.500	4.400
CDRH6D28-6R0N	6.00	30%	35.00	2.250	2.813	3.200	4.000
CDRH6D28-7R3N	7.30	30%	55.00	2.100	2.625	3.000	3.800
CDRH6D28-8R6N	8.60	30%	58.00	1.850	2.313	2.700	3.400
CDRH6D28-100M	10.0	20%	65.00	1.700	2.125	2.400	3.000
CDRH6D28-120M	12.0	20%	70.00	1.550	1.938	2.200	2.800
CDRH6D28-150M	15.0	20%	85.00	1.400	1.750	2.000	2.500
CDRH6D28-180M	18.0	20%	95.00	1.300	1.625	1.900	2.400
CDRH6D28-220M	22.0	20%	128.0	1.200	1.500	1.700	2.100
CDRH6D28-270M	27.0	20%	140.0	1.050	1.313	1.500	1.900
CDRH6D28-330M	33.0	20%	165.0	0.970	1.213	1.400	1.800
CDRH6D28-390M	39.0	20%	210.0	0.860	1.075	1.200	1.500
CDRH6D28-470M	47.0	20%	238.0	0.800	1.000	1.200	1.500
CDRH6D28-560M	56.0	20%	280.0	0.750	0.938	1.100	1.400
CDRH6D28-680M	68.0	20%	305.0	0.650	0.813	0.900	1.100
CDRH6D28-820M	82.0	20%	390.0	0.600	0.750	0.900	1.100
CDRH6D28-101M	100.0	20%	535.0	0.550	0.688	0.800	1.000

CDRH6D38 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH6D38-2R2N	2.20	30%	19.00	3.900	4.875	5.600	7.000
CDRH6D38-3R3N	3.30	30%	20.00	3.500	4.375	5.000	6.300
CDRH6D38-4R7N	4.70	30%	25.00	2.900	3.625	4.200	5.300
CDRH6D38-5R6N	5.60	30%	27.00	2.700	3.375	3.900	4.900

CDRH6D38 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
CDRH6D38-6R8N	6.80	30%	31.00	2.400	3.000	3.500	4.400
CDRH6D38-8R2N	8.20	30%	34.00	2.200	2.750	3.200	4.000
CDRH6D38-100M	10.00	20%	38.00	2.020	2.525	2.900	3.600
CDRH6D38-120M	12.00	20%	55.00	1.700	2.125	2.400	3.000
CDRH6D38-150M	15.00	20%	57.00	1.600	2.000	2.300	2.900
CDRH6D38-180M	18.00	20%	90.00	1.500	1.875	2.200	2.800
CDRH6D38-220M	22.00	20%	96.00	1.300	1.625	1.900	2.400
CDRH6D38-270M	27.00	20%	109.0	1.200	1.500	1.700	2.100
CDRH6D38-330M	33.00	20%	124.0	1.100	1.375	1.600	2.000
CDRH6D38-390M	39.00	20%	138.0	1.000	1.250	1.400	1.800
CDRH6D38-470M	47.00	20%	155.0	0.950	1.188	1.400	1.800
CDRH6D38-560M	56.00	20%	200.0	0.850	1.063	1.200	1.500
CDRH6D38-680M	68.00	20%	235.0	0.750	0.938	1.100	1.400
CDRH6D38-820M	82.00	20%	325.0	0.700	0.875	1.000	1.300
CDRH6D38-101M	100.0	20%	358.0	0.650	0.813	0.900	1.100
CDRH6D38-121M	120.0	20%	465.0	0.590	0.738	0.800	1.000
CDRH6D38-151M	150.0	20%	575.0	0.550	0.688	0.800	1.000
CDRH6D38-181M	180.0	20%	692.0	0.490	0.613	0.700	0.900
CDRH6D38-221M	220.0	20%	762.0	0.430	0.538	0.600	0.800
CDRH6D38-271M	270.0	20%	1129	0.400	0.500	0.600	0.800
CDRH6D38-331M	330.0	20%	1268	0.380	0.475	0.500	0.600
CDRH6D38-391M	390.0	20%	1412	0.350	0.438	0.500	0.600
CDRH6D38-471M	470.0	20%	1780	0.320	0.400	0.500	0.600
CDRH6D38-561M	560.0	20%	2010	0.290	0.363	0.400	0.500
CDRH6D38-681M	680.0	20%	2520	0.250	0.313	0.400	0.500
CDRH6D38-821M	820.0	20%	2748	0.220	0.275	0.300	0.400
CDRH6D38-102K	1000	10%	3627	0.200	0.250	0.300	0.400

Remarks:

- * All test data is referenced to 25°C ambient temperature.
- * Test equipment: VC4092B, TH2516B, HP4284/HP4284A, HP4285 or equivalent.
- * Inductance: at 100kHz/1.0Vrms.
- * Isat: DC current at which the inductance drops 30% from its initial value without current.
- * I rms: DC current that causes the temperature rise ($\Delta T=40^{\circ}\text{C}$) from 25°C.