

FCDS series (Rev. 4.0)**Features**

- * RoHS compliant
- * Available in magnetic shielding
- * Low DC resistance
- * Suitable for large currents
- * Ideal for DC-DC converter inductor applications
- * Available on tape and reel for automatic surface mounting

Product Identification

FCDS **418** - **100**

1 2 3

1. Product Code
2. Size Code: 4.2 * 4.2 * 1.8mm
3. Inductance: 10uH

Applications

- * DC/DC converters, etc
- * Power supply for VTRs
- * OA equipment
- * LCD televisions
- * Notebook PCs
- * Portable communication devices

Operating & Storage Condition :

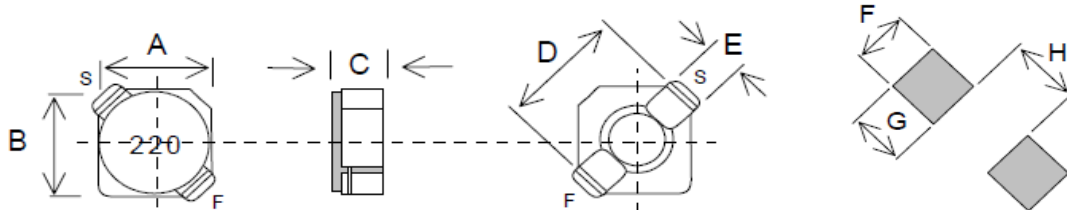
- * Operating Temp :Stand Type:-40 to +85 ℃
- * Storage Temp : Stand Type -40 to +85 ℃
- * Storage Life Time :12 Months @25 ℃,RH 65%

Test Equipment :

- * HP4284A,HP42841A-L,IDC,Q,RDC
- * HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions :

- * Ambient Temp : 20+/-15 ℃
- * Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(ref.)	F(ref.)	G(ref.)	H(ref.)
310	3.3	3.3	1.1	4.4	1.3	1.4	1.3	1.7
312	3.3	3.3	1.3	4.4	1.3	1.4	1.3	1.7
315	3.3	3.3	1.6	4.4	1.3	1.4	1.3	1.7
320	3.2	3.2	2.0	4.4	1.3	1.4	1.3	1.7
418	4.2	4.2	1.8	5.5	1.5	1.4	1.4	2.4

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Electrical Characteristics

L Code	L (uH)	DCR (mΩ) max. / IDC (A) max.											
		FCDS 310		FCDS 312		FCDS 315		FCDS 320		FCDRS 320LD		FCDS 418	
R20	0.20							22	5.35				
R36	0.36							29	4.62				
R56	0.56							33	3.75				
R82	0.82							39	2.91				
1R0	1.0					58	1.95					43	1.68
1R1	1.1							43	2.50				
1R5	1.5			68	0.90	63	1.80					52	1.55
1R7	1.7							44	1.85				
1R8	1.8					75	1.65						
2R2	2.2	144	0.73	98	0.78	94	1.50	60	1.60	41	0.85	72	1.20
2R7	2.7					106	1.35						
3R3	3.3	195	63.00	123	0.60	125	1.20	86	1.45	54	0.75	85	1.10
3R9	3.9					138	1.10						
4R7	4.7	288	0.54	170	0.50	169	1.00	140	1.20	78	0.63	105	0.90
5R6	5.6					188	0.95						
6R3	6.3							160	1.05				
6R8	6.8	425	0.45	260	0.44	213	0.85			106	0.52	170	0.73
8R2	8.2	475	0.41			281	0.80	245	0.85				
100	10	538	0.36	400	0.35	294	0.70			180	0.43	210	0.55
120	12					394	0.62						
150	15	750	0.31					345	0.70	220	0.35	295	0.45
220	22	1560	0.26	748	0.22	781	0.40			320	0.30	430	0.40
330	33	1680	0.21							460	0.24	660	0.32
470	47									660	0.20	1000	0.26
680	68					2760	0.25						

* Test Freq.(L): 310/312/315/320/320LD/418 @ 100KHz/1.0v.

* Irms DC current (A) that will cause an approximate ΔT of 40°C.

* Isat DC current (A) that will cause L to drop approximately 35%.

* Tolerance: FCDS-310/312/315/320/320LD/418 (M=±20%, N=±30%); FCDS-320 (0.2~1.1uH N=±35%; 1.7~15uH N=±30%).