

SMD High Current Molded Inductors - FCH1040 – Series

FCH1040-Series

●Features:

- Ultra low cost
- Shielded constructions
- High current rating up to DC 45Amp
- High frequency range up to 5MHz
- Very low DC resistance
- Low Noise

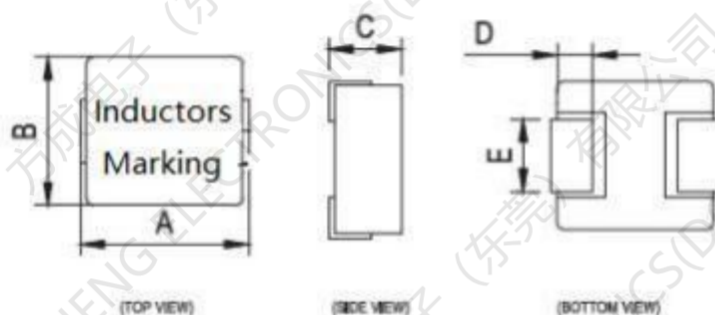
●RoHS compliant

●Applications:

- PDA/Notebook/Desktop/Server applications
- DC/DC converter



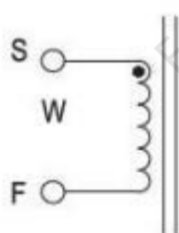
1.Shapes and Dimensions (形状及尺寸)



Type	A	B	C	D	E
FCH1040	11.5 MAX	10.5 MAX	4.0 MAX	2.3±0.3	3.0±0.3

2. Schematic:

recommendation: (mm)



3. layout



4. FCH1040 –Series:

Part Number (品名)	Inductance (μH) $\pm 20\%$ (电感值)	DCR($\text{m}\Omega$) (直流阻抗)		Isat DC Current (A) (饱和电流)	Irms DC Current (A) (温升电流)
		Typical	MAX	Typical	Typical
FCH1040-R15M	0.15	0.60	0.65	60.0	45.0
FCH1040-R20M	0.20	0.60	0.76	60.0	35.0
FCH1040-R22M	0.22	0.60	0.76	60.0	35.0
FCH1040-R30M	0.30	0.75	0.95	42.0	38.0
FCH1040-R33M	0.33	0.87	1.00	45.0	35.0
FCH1040-R36M	0.36	1.10	1.26	38.0	35.0
FCH1040-R47M(点焊)	0.47	2.30	3.00	35.0	30.0
FCH1040-R47M(打扁)	0.47	1.30	1.50	35.0	30.0
FCH1040-R56M	0.56	1.80	2.00	30.0	25.5
FCH1040-R68M	0.68	1.80	2.40	29.0	25.0
FCH1040-R80M	0.80	2.50	3.00	25.0	20.0
FCH1040-1R0M	1.00	3.50	4.2	23.0	18.0
FCH1040-1R5M	1.50	4.60	5.3	22.0	15.0
FCH1040-2R2M	2.20	5.80	7.6	17.0	14.0
FCH1040-3R3M	3.30	9.00	12.0	15.0	13.0
FCH1040-4R7M	4.70	13.00	15.5	13.0	9.0
FCH1040-5R6M	5.60	16.00	23.0	11.5	8.2
FCH1040-6R8M	6.80	19.80	23.0	11.0	7.8
FCH1040-8R2M	8.20	27.0	31.0	9.0	7.5
FCH1040-100M	10.00	31.0	36.0	9.0	7.2
FCH1040-150M	15.00	48.5	56.0	6.5	5.5
FCH1040-220M	22.00	52.0	68.5	6.0	5.1
FCH1040-330M	33.00	86.0	98.0	5.0	4.0
FCH1040-470M	47.00	131	150	4.0	3.0
FCH1040-680M	68.00	213	240	3.5	2.9
FCH1040-101M	100.00	330	370	2.0	1.8
FCH1040-151M	151.00	376	481	2.0	1.5

Remark:

<1>Inductance: 100KHz 0.1V

<2>Tolerance of inductance: $\pm 20\%$

<3>Isat: The value of current indicates that inductance drops 30% (Typical) from its initial value

<4>Irms: The value of current indicates that the temperature of the coil is increase 40°C (Typical)

<5>Test condition: Ta= 25°C