

## SMD High Current Molded Inductors - FCH0420 - Series

FCH0420-Series

**●Features:**

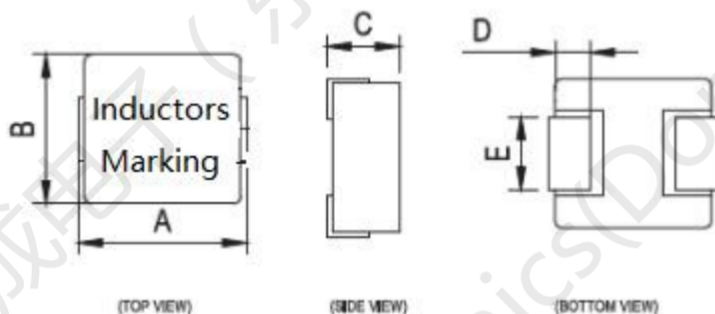
- Ultra low cost
- Shielded constructions
- High frequency range up to 5MHz
- Very low DC resistance
- Low Noise
- RoHS compliant

**●Applications:**

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

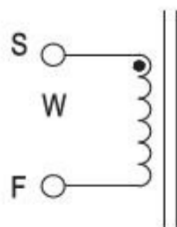


### 1.Shapes and Dimensions (形状及尺寸)

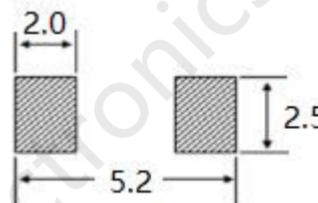


Type	A	B	C	D	E
FCH0420	4.6±0.3	4.1±0.3	2.0 MAX	1.1±0.3	2.0±0.3

### 2. Schematic:



### 3. layout recommendation: (mm)



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4.FCH0420-Series:

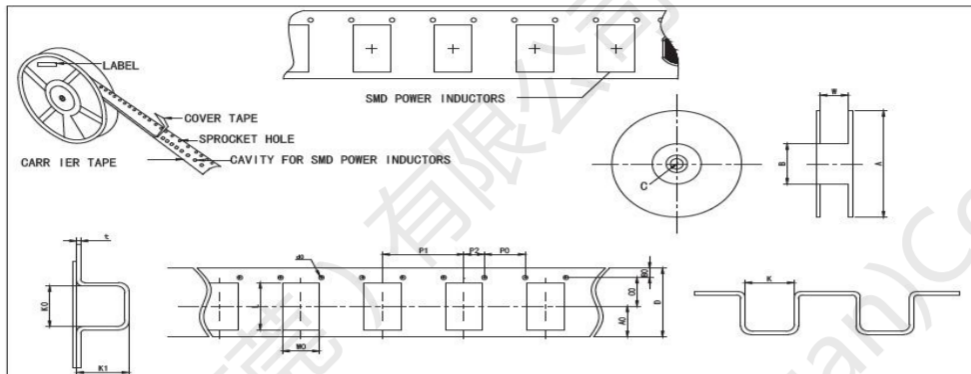
Part Number (品名)	Inductance ( $\mu$ H) $\pm$ 20% (电感值)	DCR( $m\Omega$ ) (直流阻抗)		Isat DC Current (A) (饱和电流)	Irms DC Current (A) (温升电流)
		Typical	MAX	Typical	Typical
FCH0420-R10Y	0.1 $\pm$ 30%	3.8	4.2	15.0	14.0
FCH0420-R22M	0.22	4.0	6.3	13.0	8.0
FCH0420-R33M	0.33	7.2	9.6	11.0	7.0
FCH0420-R47M	0.47	10	12	10.0	6.5
FCH0420-R56M	0.56	11	14.0	9.0	6.5
FCH0420-R68M	0.68	17	20	8.0	5.0
FCH0420-1R0M	1.00	23	27	7.0	5.0
FCH0420-1R2M	1.20	24	29	6.5	5.0
FCH0420-1R5M	1.50	30	36	6.5	4.5
FCH0420-2R2M	2.20	41	49	5.0	4.0
FCH0420-3R3M	3.30	62	76	4.0	3.5
FCH0420-4R7M	4.70	101	127	3.5	3.0
FCH0420-5R6M	5.60	126	150	3.0	2.5
FCH0420-6R8M	6.80	137	157	2.5	2.2
FCH0420-8R2M	8.20	145	180	2.5	2.0
FCH0420-100M	10.00	181	243	2.0	1.8
FCH0420-150M	15.00	280	330	1.5	1.4
FCH0420-220M	22.00	401	500	1.3	1.2

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

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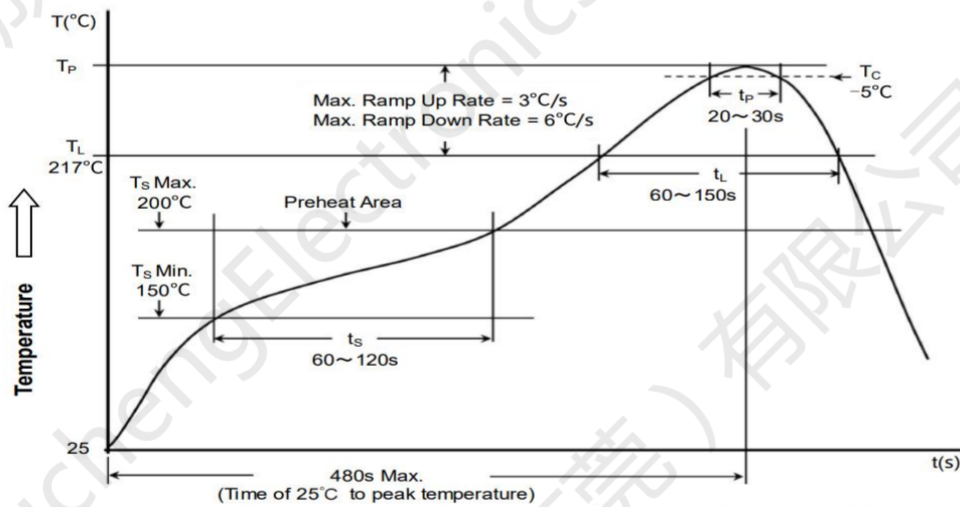
### 5.FCH0420-Series



#### 5.1 Reel Dimensions & Packing Unit (卷轴尺寸及包装数量)

Part Number 品名	Dimensions of Reel 卷轴尺寸				Packaging Unit 包装数
	A	B	C	W	
FCH0420	330	100.0±1.00	13.0±1.0	12.5±0.20	3000pcs/r

#### 6. Reflow Profile for SMT Components



	Package Thickness 封装厚度	Package Volume 封装体积		
		<350 mm <sup>3</sup>	350~2000 mm <sup>3</sup>	>2000 mm <sup>3</sup>
PB-Free Assembly 无铅装配	<1.6mm	260°C	260°C	260°C
	1.6~2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.  
回流焊参照标准 IPC/JEDEC J-STD-020D。