

## SMD High Current Molded Inductors - FCH1350- Series

FCH1350-Series

### ●Features:

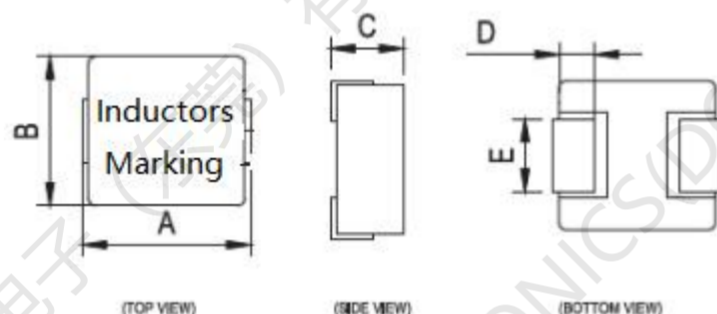
- Ultra low cost
- Shielded constructions
- High current rating up to DC 38Amp
- High current ISATup to DC 60Amp
- Very low DC resistance
- Low Noise
- RoHS compliant

### ●Applications:

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

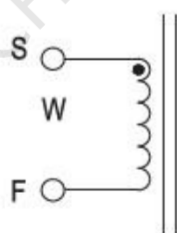


### 1.Shapes and Dimensions ( 形状及尺寸 )

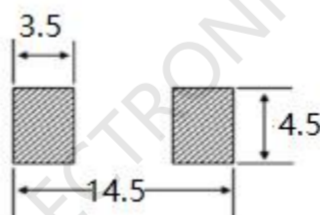


| Type    | A        | B        | C       | D       | E       |
|---------|----------|----------|---------|---------|---------|
| FCH1350 | 13.7±0.3 | 12.8±0.3 | 5.0 MAX | 2.7±0.3 | 3.8±0.3 |

### 2.Schematic:



### 3.layout recommendation:(mm)



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### 4. FCH1350 -Series:

| Part Number<br>(品名) | Inductance<br>(uH) $\pm 20\%$<br>(电感值) | DCR(m $\Omega$ )<br>(直流阻抗) |       | Isat<br>DC Current<br>(A)<br>(饱和电流) | Irms<br>DC Current<br>(A)<br>(温升电流) |
|---------------------|----------------------------------------|----------------------------|-------|-------------------------------------|-------------------------------------|
|                     |                                        | Typical                    | MAX   | Typical                             | Typical                             |
| FCH1350-R22M        | 0.22                                   | 0.5                        | 0.7   | 60.0                                | 38.0                                |
| FCH1350-R47M        | 0.47                                   | 1.0                        | 1.5   | 60.0                                | 36.0                                |
| FCH1350-R56M        | 0.56                                   | 1.0                        | 1.5   | 50.0                                | 35.0                                |
| FCH1350-R68M        | 0.68                                   | 1.1                        | 1.6   | 30.0                                | 30.0                                |
| FCH1350-1R0M        | 1.00                                   | 1.8                        | 2.2   | 28.0                                | 24.0                                |
| FCH1350-1R2M        | 1.20                                   | 2.0                        | 3.1   | 28.0                                | 24.0                                |
| FCH1350-1R5M        | 1.50                                   | 1.9                        | 3.2   | 28.0                                | 24.0                                |
| FCH1350-2R2M        | 2.20                                   | 4.0                        | 4.5   | 25.0                                | 21.0                                |
| FCH1350-3R3M        | 3.30                                   | 5.0                        | 7.0   | 21.0                                | 18.0                                |
| FCH1350-3R9M        | 3.90                                   | 7.0                        | 9.0   | 20.0                                | 16.0                                |
| FCH1350-4R7M        | 4.70                                   | 8.9                        | 11.0  | 21.0                                | 14.0                                |
| FCH1350-5R6M        | 5.60                                   | 11.5                       | 13.5  | 17.0                                | 13.0                                |
| FCH1350-6R8M        | 6.80                                   | 13.0                       | 15.0  | 16.0                                | 12.0                                |
| FCH1350-8R2M        | 8.20                                   | 15.0                       | 22.0  | 14.0                                | 10.0                                |
| FCH1350-100M        | 10.00                                  | 16.0                       | 22.0  | 13.0                                | 9.0                                 |
| FCH1350-150M        | 15.00                                  | 25.0                       | 30.0  | 11.0                                | 9.0                                 |
| FCH1350-220M        | 22.00                                  | 33.0                       | 55.0  | 8.5                                 | 7.0                                 |
| FCH1350-270M        | 27.00                                  | 50.0                       | 68.0  | 7.0                                 | 6.0                                 |
| FCH1350-330M        | 33.00                                  | 65.0                       | 84.0  | 8.0                                 | 5.0                                 |
| FCH1350-470M        | 47.00                                  | 81.0                       | 93.0  | 5.5                                 | 4.5                                 |
| FCH1350-560M        | 56.00                                  | 102.0                      | 117.0 | 5.5                                 | 4.0                                 |

#### Remark:

<1>Inductance: 100KHz 0.1V

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

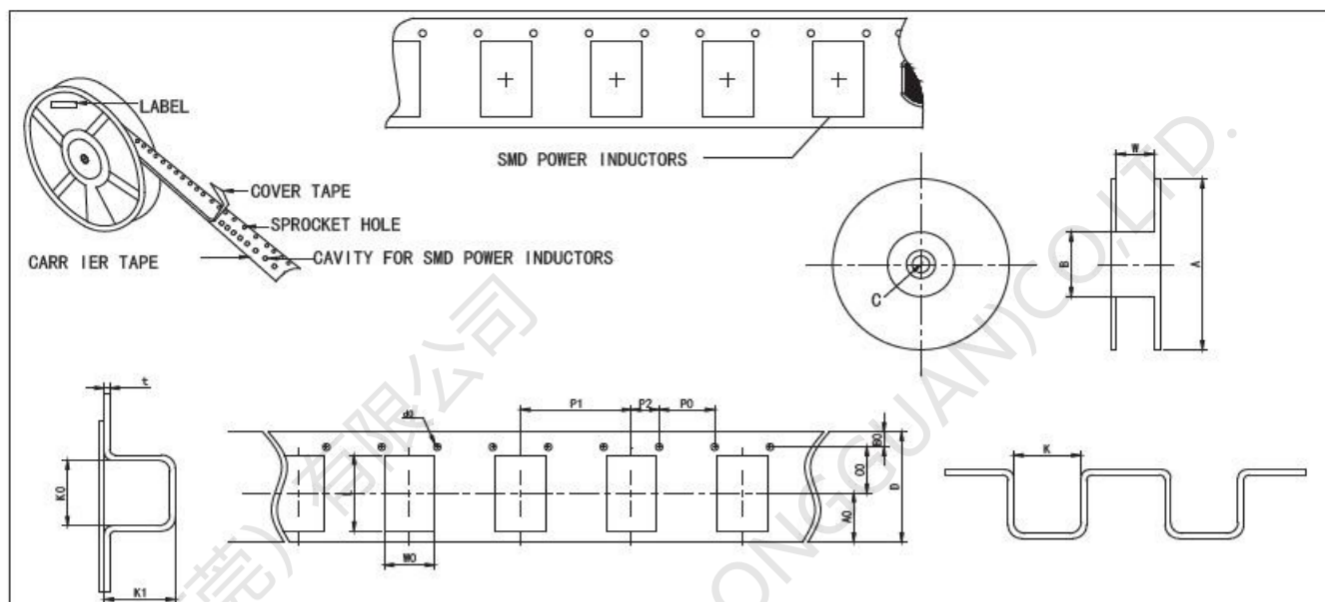
<3>Isat: The value of current indicates that inductance drops 30% (Typical) from its initial value

<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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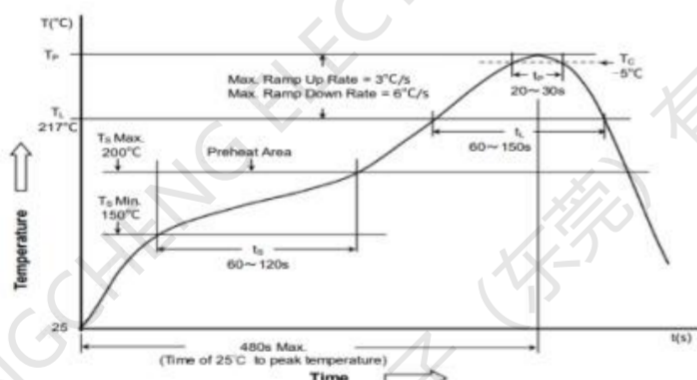
### 5.FCH1350-Series



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

| Part Number<br>品名 | Dimensions of Reel<br>卷轴尺寸 |            |          |           | Packaging Unit<br>包装数 |
|-------------------|----------------------------|------------|----------|-----------|-----------------------|
|                   | A                          | B          | C        | W         |                       |
| FCH1350           | 330                        | 100.0±2.00 | 13.5±1.0 | 24.0±0.50 | 500pcs/r              |

#### 6. Reflow Profile for SMT Components



|                          | Package Thickness<br>封装厚度 | Package Volume<br>封装体积 |                          |                       |
|--------------------------|---------------------------|------------------------|--------------------------|-----------------------|
|                          |                           | <350 mm <sup>3</sup>   | 350~2000 mm <sup>3</sup> | >2000 mm <sup>3</sup> |
| PB-Free Assembly<br>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.