

## SMD High Current Molded Inductors - FCH1350- Series

FCH1350-Series

**●Features:**

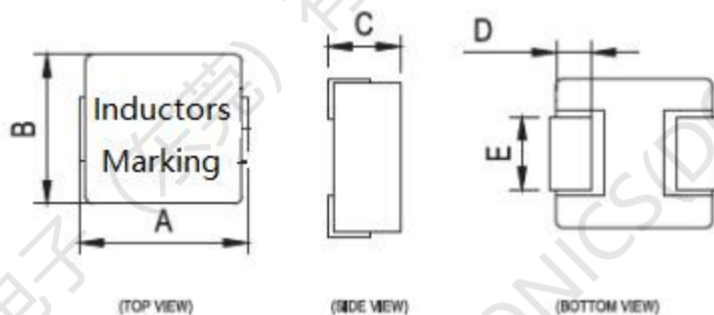
- Ultra low cost
- Shielded constructions
- High current rating up to DC 38Amp
- High current ISATup to DC 60Amp
- Very low DC resistance
- Low Noise
- RoHS compliant

**●Applications:**

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

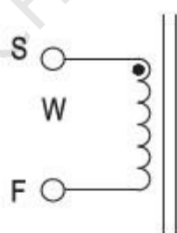


### 1.Shapes and Dimensions ( 形状及尺寸 )

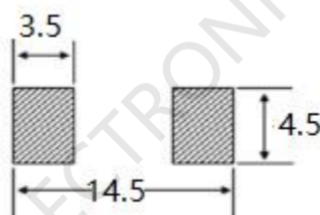


| Type    | A        | B        | C       | D       | E       |
|---------|----------|----------|---------|---------|---------|
| FCH1350 | 13.7±0.3 | 12.8±0.3 | 5.0 MAX | 2.7±0.3 | 3.8±0.3 |

### 2.Schematic:



### 3.layout recommendation:(mm)



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4. FCH1350 -Series:

| Part Number<br>(品名) | Inductance<br>(uH) ±20%<br>(电感值) | DCR(mΩ)<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:±20%

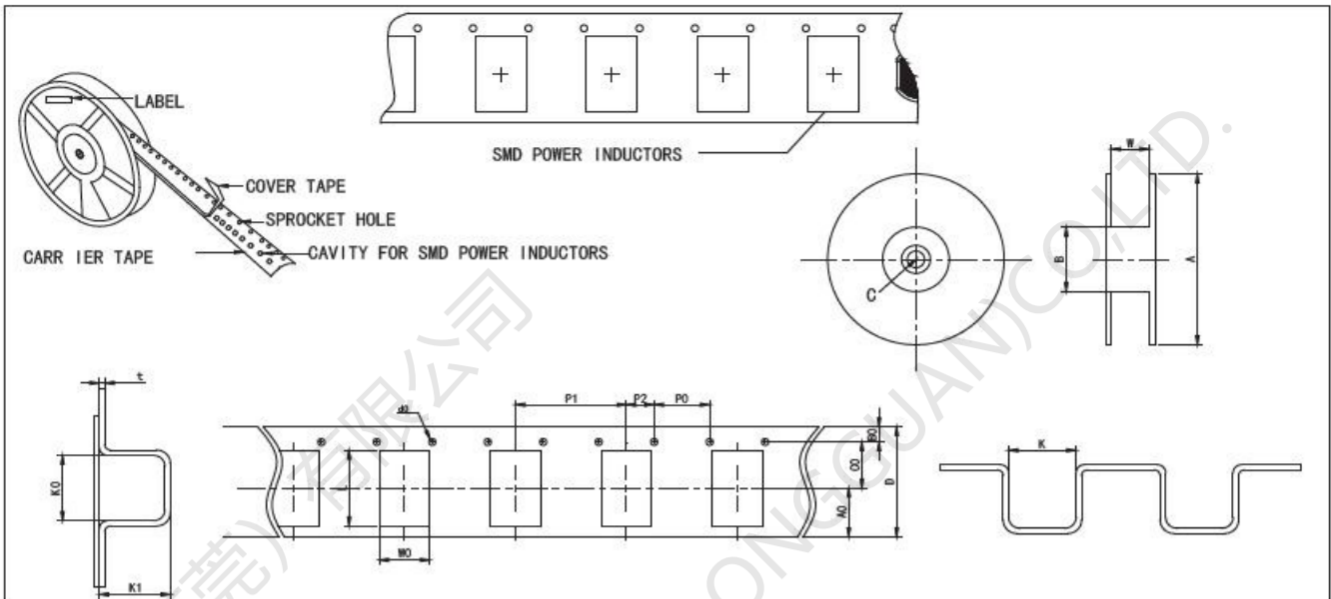
<3>Isat: The value of current indicates that inductance drops 30%( Typical ) from its initial value

<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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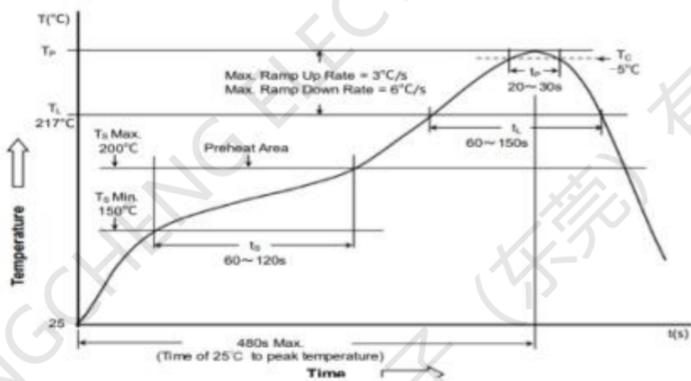
### 5.FCH1350-Series



#### ●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.