



## Specifications:

|                          |                |
|--------------------------|----------------|
| Inductance               | : 470 $\mu$ H  |
| Inductance Tolerance     | : $\pm$ 10%    |
| DC Resistance Max        | : 4.9 $\Omega$ |
| DC Current Rating        | : 180mA        |
| Self Resonant Frequency  | : 5MHz         |
| Inductor Case Style      | : SMD          |
| No. of Pins              | : 2            |
| Lead Spacing             | : 2mm          |
| Core Material            | : Ferrite      |
| External Depth           | : 4.8mm        |
| External Length / Height | : 3mm          |
| External Width           | : 5mm          |
| Resonant Frequency       | : 1kHz         |
| Series                   | : MCSDC503     |

## Electrical Characteristics (at 25°C)

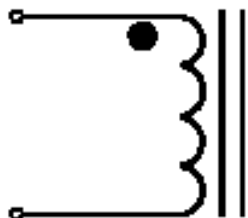
|                                  |            |                              |
|----------------------------------|------------|------------------------------|
| 1kHz 1V                          | L          | 470 $\mu$ H $\pm$ 10%        |
| at 25°C                          | DCR        | 4.9 $\Omega$ (Max.)          |
| 1kHz 1V I <sub>rms</sub> = 0.18A | $\Delta$ T | Temperature Rise 40°C (Max.) |

Operating temperature: -55°C to +130°C

## Material List

| No. | Item               | Material Description                           |
|-----|--------------------|--|
| 1   | Core               | R5A CDR5 $\times$ 3 (ST) B2 F1.5               |
| 2   | Wire               | $\varnothing$ 0.09mm $\times$ 1P 2UEF1/U 155°C |
| 3   | Solder (Lead Free) | Sn99.3%/Cu0.7%                                 |
| 4   | Glue               | TH320  |

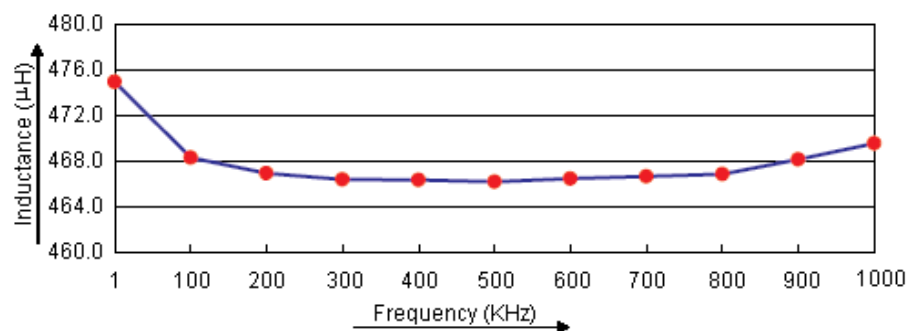
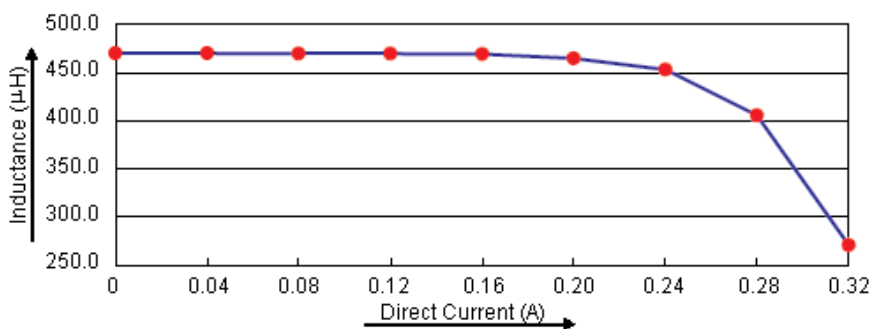
## Schematic Diagram



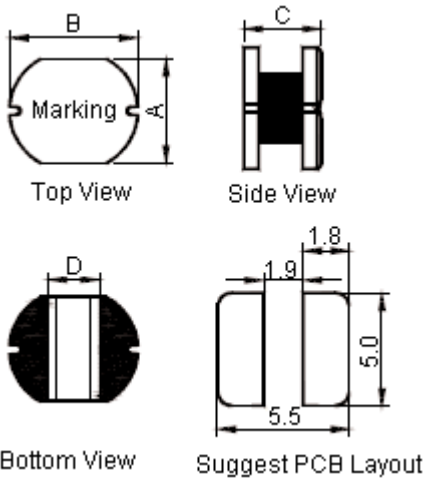
### Note:

1. Wire  $\varnothing 0.09\text{mm} \times 1\text{P } 2\text{UEF1/U } 155^\circ\text{C}$
2. 138.5TS (Reference)

## Electric Characteristics



## Configurations and Dimensions



|   |            |             |
|---|------------|-------------|
| A | 4.8 ±0.5mm | -           |
| B | 5 ±0.3mm   | -           |
| C | 3 ±0.3mm   | -           |
| D | 2mm        | (Reference) |

Dimensions : Millimetres

## Part Number Table

| Description               | Part Number     |
|---------------------------|-----------------|
| Inductor, 470µH, 10%, SMD | MCSDC0503-471KU |

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