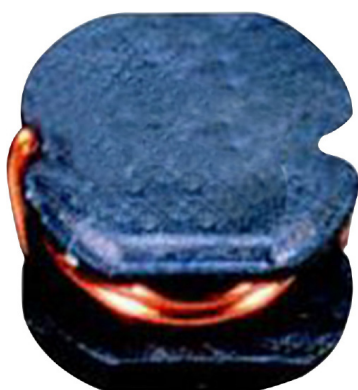


RoHS  
Compliant



## Specifications:

|                          |                 |
|--------------------------|-----------------|
| Inductance               | : 180 $\mu$ H   |
| Inductance Tolerance     | : $\pm$ 10%     |
| DC Resistance Max        | : 0.71 $\Omega$ |
| DC Current Rating        | : 510mA         |
| Inductor Case Style      | : SMD           |
| No. of Pins              | : 2             |
| Lead Spacing             | : 3mm           |
| Core Material            | : Ferrite       |
| External Depth           | : 7mm           |
| External Length / Height | : 5mm           |
| External Width           | : 7.8mm         |
| Resonant Frequency       | : 100kHz        |
| Series                   | : MCSD75        |

## Electrical Characteristics (at 25°C)

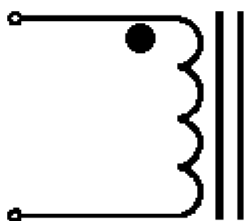
|                                       |            |                              |
|---------------------------------------|------------|------------------------------|
| 100kHz 0.25V                          | L          | 180 $\mu$ H $\pm$ 10%        |
| at 25°C                               | DCR        | 0.71 $\Omega$ (Max.)         |
| 100kHz 0.25V I <sub>rms</sub> = 0.51A | $\Delta$ T | Temperature Rise 40°C (Max.) |

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

## Material List

| No. | Item               | Material Description                        |
|-----|--------------------|---------------------------------------------|
| 1   | Core               | R5A CDR7.8 $\times$ 5(ST) B2.9 F2.5         |
| 2   | Wire               | $\varnothing$ 0.2mm $\times$ 1P 2UEWF 155°C |
| 3   | Solder (Lead Free) | Sn99.3%/Cu0.7%                              |

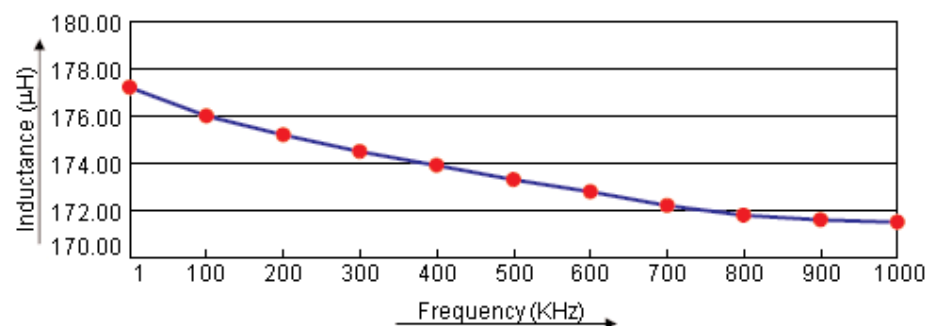
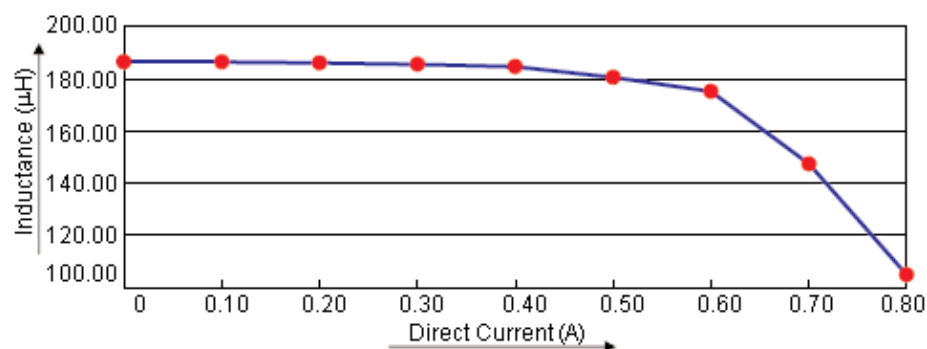
## Schematic Diagram



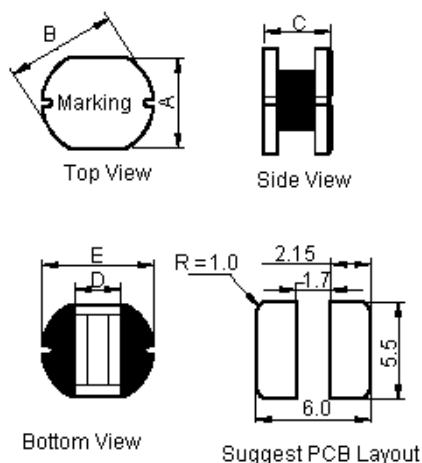
### Note:

1. Wire  $\varnothing 0.2\text{mm} \times 1\text{P}$  2UEWF 155°C
2. 70.5TS (Reference)

## Electric Characteristics



## Configurations and Dimensions



|   |                        |             |
|---|------------------------|-------------|
| A | $7 \pm 0.3\text{mm}$   | -           |
| B | $7.8 \pm 0.3\text{mm}$ | -           |
| C | $5 \pm 0.5\text{mm}$   | -           |
| D | $3\text{mm}$           | (Reference) |
| E | $8 \pm 0.5\text{mm}$   | -           |

Dimensions : Millimetres

## Part Number Table

| Description                                          | Part Number  |
|------------------------------------------------------|--------------|
| Inductor, $180\mu\text{H}$ , $510\text{mA}$ , $10\%$ | MCSD75-181KU |

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