



Specifications:

| | |
|--------------------------|-----------------|
| Inductance | : 27 μ H |
| Inductance Tolerance | : \pm 10% |
| DC Resistance Max | : 0.12 Ω |
| DC Current Rating | : 1.3A |
| Self Resonant Frequency | : 12MHz |
| Inductor Case Style | : SMD |
| No. of Pins | : 2 |
| Lead Spacing | : 2.6mm |
| Core Material | : Ferrite |
| External Depth | : 7.8mm |
| External Length / Height | : 5.3mm |
| External Width | : 8mm |
| Resonant Frequency | : 1kHz |
| Series | : MCSDC0805 |

Electrical Characteristics (at 25°C)

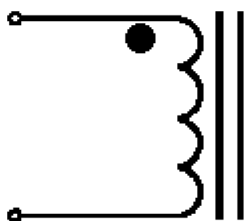
| | | |
|--------------------------|----------------|------------------------------|
| 1kHz 1V | L | 27 μ H \pm 10% |
| at 25°C | DCR | 120m Ω (Max.) |
| 1kHz 1V I_{sat} = 2.1A | L at I_{sat} | L drops 35% (Maximum) |
| 1kHz 1V I_{rms} = 1.3A | ΔT | Temperature Rise 40°C (Max.) |

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

Material List

| No. | Item | Material Description |
|-----|--------------------|---|
| 1 | Core | R5A CDR7.5 \times 5 (ST) B3.4 F2.5 |
| 2 | Wire | \varnothing 0.3mm \times 1P 2UEWF (155°C) |
| 3 | Solder (Lead Free) | Sn99.3%/Cu0.7% |

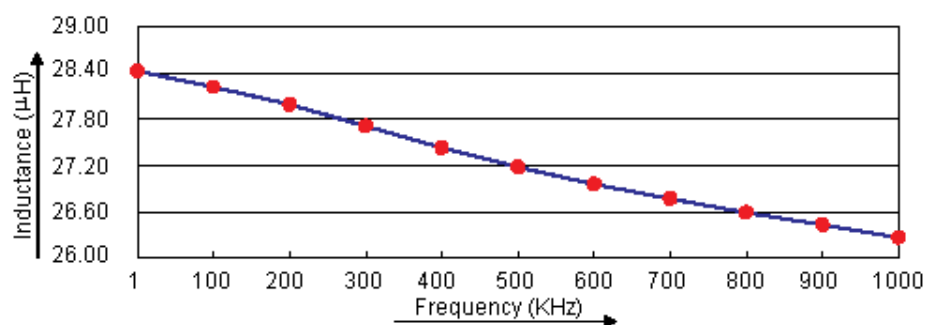
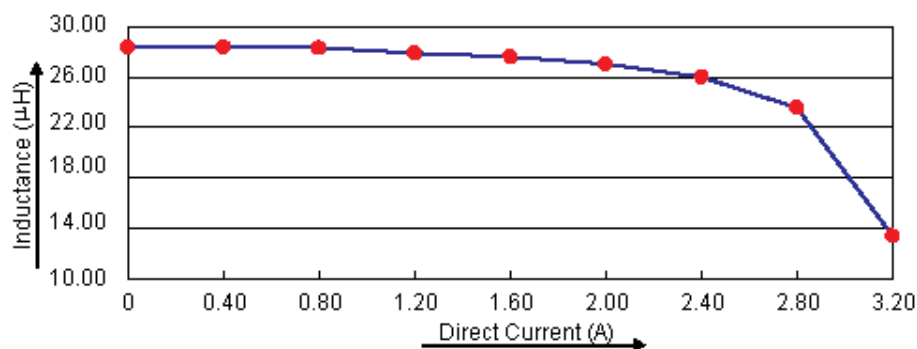
Schematic Diagram



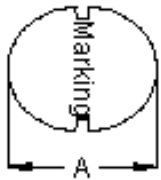
Note:

1. Wire $\varnothing 0.3\text{mm} \times 1\text{P 2UEWF155}^\circ\text{C}$
2. 27.5TS (Reference)

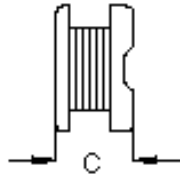
Electric Characteristics



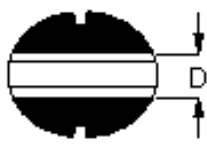
Configurations and Dimensions



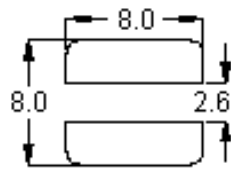
Top View



Side View



Bottom View



Suggest PCB Layout

| | | |
|---|-------|-------------|
| A | 7.8mm | (Maximum) |
| B | 5.3mm | (Maximum) |
| C | 2.6mm | (Reference) |

Dimensions : Millimetres

Part Number Table

| Description | Part Number |
|--------------------------------|-----------------|
| Inductor, 27 μ H, 10%, SMD | MCSDC0805-270KU |

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