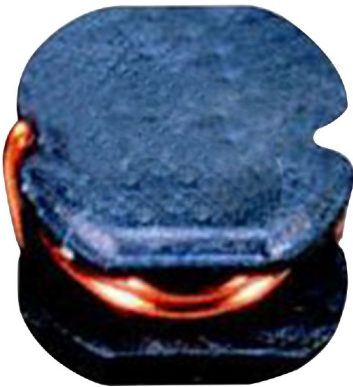


RoHS
Compliant



Specifications:

| | |
|--------------------------|-----------------|
| Inductance | : 12 μ H |
| Inductance Tolerance | : \pm 20% |
| DC Resistance Max | : 0.36 Ω |
| DC Current Rating | : 2.45A |
| Inductor Case Style | : SMD |
| No. of Pins | : 2 |
| Lead Spacing | : 3.5mm |
| Core Material | : Ferrite |
| External Depth | : 9mm |
| External Length / Height | : 5.4mm |
| External Width | : 10.2mm |
| Resonant Frequency | : 100kHz |
| Series | : MCSD105 |

Electrical Characteristics (at 25°C)

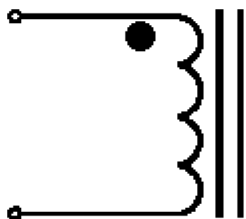
| | | |
|---------------------------------------|------------|------------------------------|
| 100kHz 0.25V | L | 12 μ H \pm 20% |
| at 25°C | DCR | 36m Ω (Max.) |
| 100kHz 0.25V I _{rms} = 2.45A | Δ T | Temperature Rise 40°C (Max.) |

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

Material List

| No. | Item | Material Description |
|-----|--------------------|---|
| 1 | Core | R5A CDR10 \times 5.4(ST) B3.8 F2.6 |
| 2 | Wire | \varnothing 0.5mm \times 1P 2UEWF 155°C |
| 3 | Solder (Lead Free) | Sn99.3%/Cu0.7% |

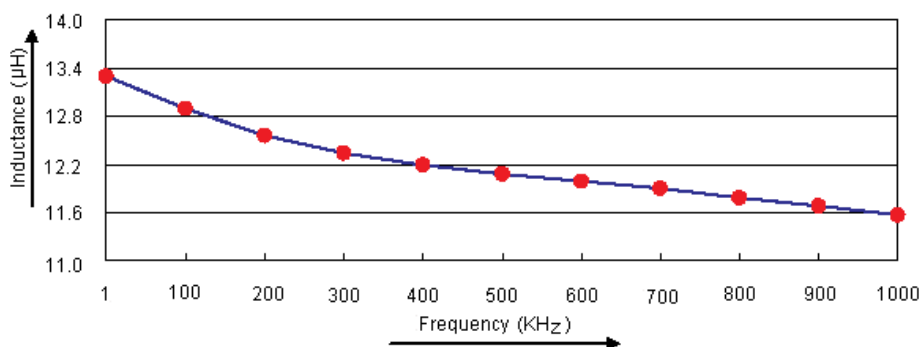
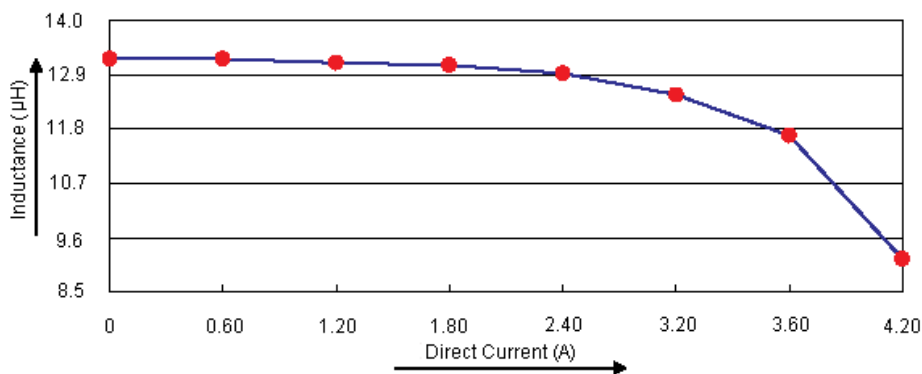
Schematic Diagram



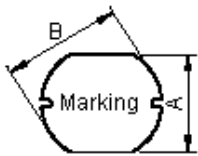
Note:

1. Wire $\varnothing 0.5\text{mm} \times 1\text{P 2UEWF } 155^\circ\text{C}$
2. 15.5TS (Reference)

Electric Characteristics



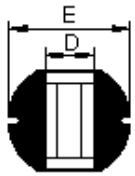
Configurations and Dimensions



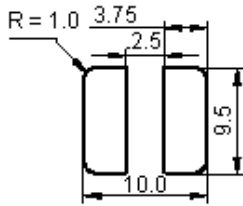
Top View



Side View



Bottom View



Suggest PCB Layout

| | | |
|---|--------------|-------------|
| A | 9 ±0.4 mm | - |
| B | 10 ±0.4 mm | - |
| C | 5.4 ±0.5 mm | - |
| D | 3.5mm | (Reference) |
| E | 10.2 ±0.5 mm | - |

Dimensions : Millimetres

Part Number Table

| Description | Part Number |
|-----------------------------|---------------|
| Inductor, 12µH, 2.45A, ±20% | MCSD105-120MU |

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