

Specifications:

| | |
|--------------------------|-----------------|
| Inductance | : 12 μ H |
| Inductance Tolerance | : \pm 20% |
| DC Resistance Max | : 0.12 Ω |
| DC Current Rating | : 1.4A |
| Inductor Case Style | : SMD |
| No. of Pins | : 2 |
| Lead Spacing | : 2mm |
| Core Material | : Ferrite |
| External Depth | : 5.2mm |
| External Length / Height | : 4.5mm |
| External Width | : 5.8mm |
| Resonant Frequency | : 100kHz |
| Series | : MCSD54 |

Electrical Characteristics (at 25°C)

| | | |
|--------------------------------------|------------|------------------------------|
| 100kHz 0.25V | L | 12 μ H \pm 20% |
| at 25°C | DCR | 120m Ω (Max.) |
| 100kHz 0.25V I _{rms} = 1.4A | Δ T | Temperature Rise 40°C (Max.) |

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

Material List

| No. | Item | Material Description |
|-----|--------------------|---|
| 1 | Core | R5A CDR5.8 \times 4.5(ST) B2.4 F2.3 |
| 2 | Wire | \varnothing 0.3mm \times 1P 2UEWF 155°C |
| 3 | Solder (Lead Free) | Sn99.3%/Cu0.7% |

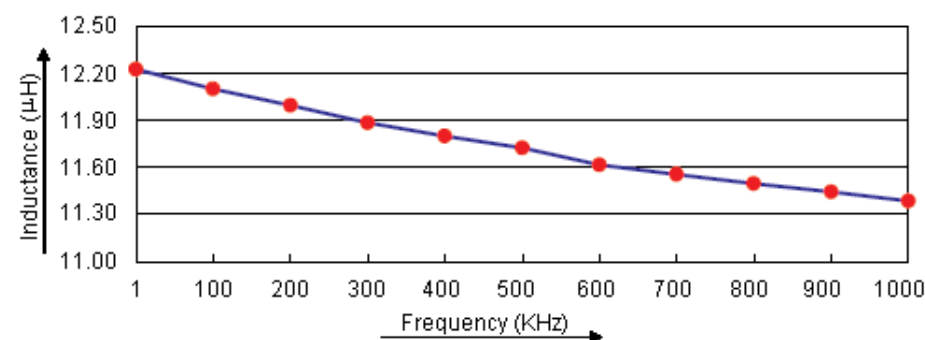
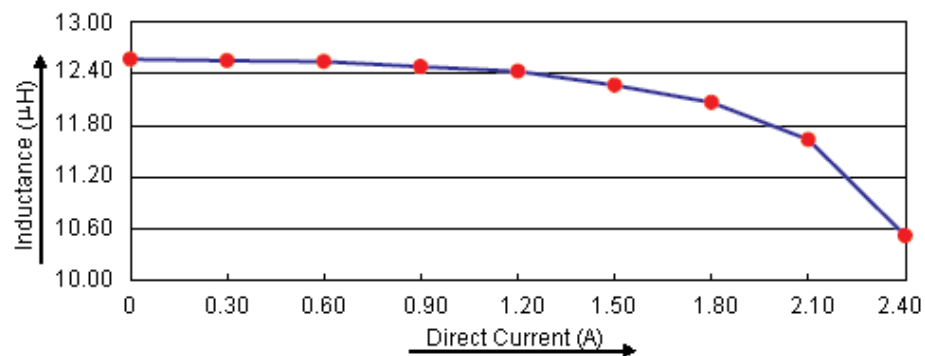
Schematic Diagram



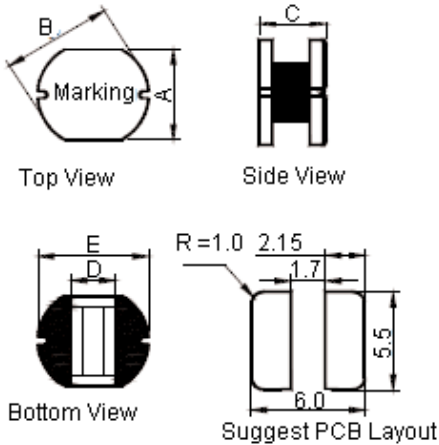
Note:

1. Wire $\varnothing 0.3\text{mm} \times 1\text{P 2UEWF } 155^\circ\text{C}$
2. 20.5TS (Reference)

Electric Characteristics



Configurations and Dimensions



| | | |
|---|-------------|-------------|
| A | 5.2 ±0.3mm | - |
| B | 5.8 ±0.3mm | - |
| C | 4.5 ±0.35mm | - |
| D | 2mm | (Reference) |
| E | 5.8 ±0.5mm | - |

Dimensions : Millimetres

Part Number Table

| Description | Part Number |
|---------------------------|--------------|
| Inductor, 12µH, 1.4A, 20% | MCSD54-120MU |

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