Wound Type SMD Inductors(Coils)

For DC to DC Converters

LTF(Closed Magnetic Circuit Core) series

Type: **LTF5022**

Issue date: November 2010

- All specifications are subject to change without notice.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

TDK

SMD Inductors(Coils)
For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

LTF Series LTF5022

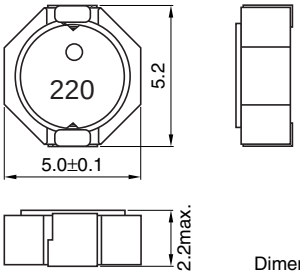
FEATURES

- Miniature size
  Mount area: 5.0×5.2mm
  Low profile: 2.2mm max. height
- Large DC current products.
- Magnetic shielding type with ferrite core.
- Available for automatic mounting in tape and real package.
- The products do not contain lead and support lead-free soldering.

APPLICATIONS

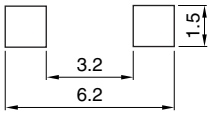
DVCs, DSCs, PDAs, HDDs, LCD displays, cellular phones, cordless telephones, etc.

SHAPES AND DIMENSIONS



Dimensions in mm

RECOMMENDED PC BOARD PATTERN



Dimensions in mm

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance(Ω)		Rated current(A)*	
				max.	typ.	Based on inductance change max.	Based on temperature rise typ.
LTF5022T-1R2N4R2-LC	1.2	±30	100	0.025	0.021	4.3	4.2
LTF5022T-1R8N3R6-LC	1.8	±30	100	0.032	0.028	3.6	3.8
LTF5022T-2R2N3R2-LC	2.2	±30	100	0.040	0.036	3.2	3.4
LTF5022T-3R3N2R5-LC	3.3	±30	100	0.060	0.054	2.5	2.7
LTF5022T-4R7N2R0-LC	4.7	±30	100	0.081	0.073	2.0	2.3
LTF5022T-100M1R4-LC	10.0	±20	100	0.16	0.14	1.4	1.7
LTF5022T-220MR98-LC	22.0	±20	100	0.32	0.28	0.9	1.2

* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

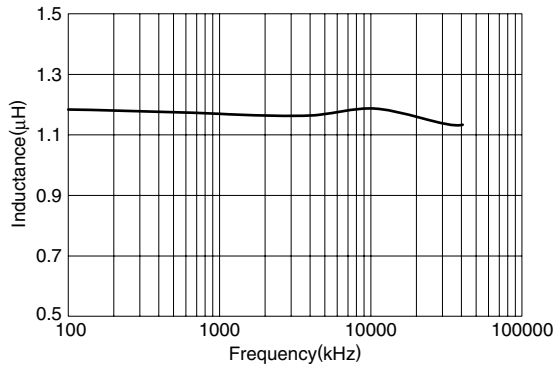
- Operating temperature range: –40 to +105°C (Including self-temperature rise)

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

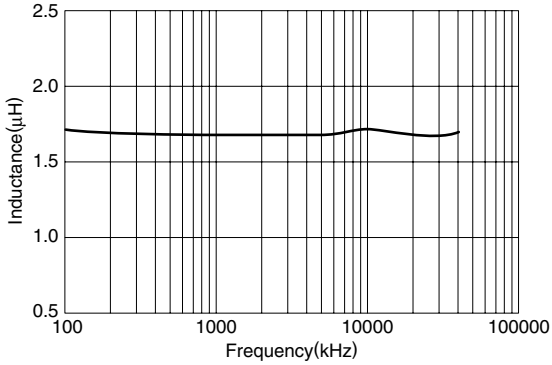
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS

LTF5022T-1R2N4R2



LTF5022T-1R8N3R6



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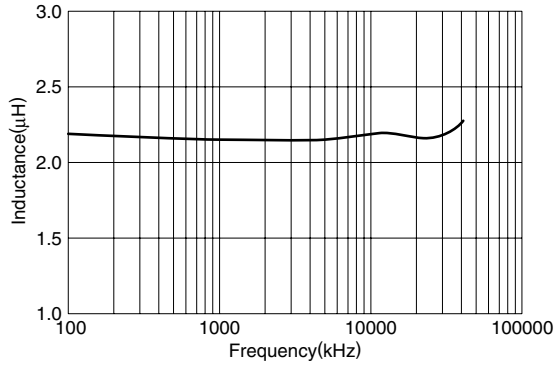

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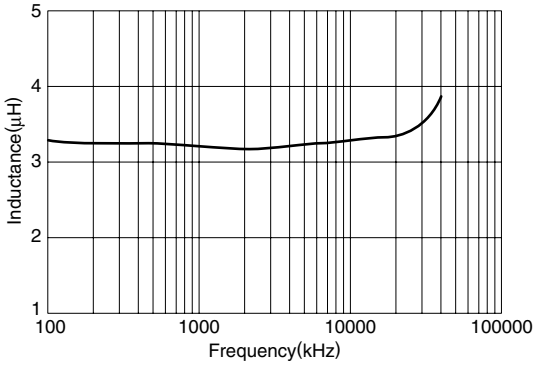

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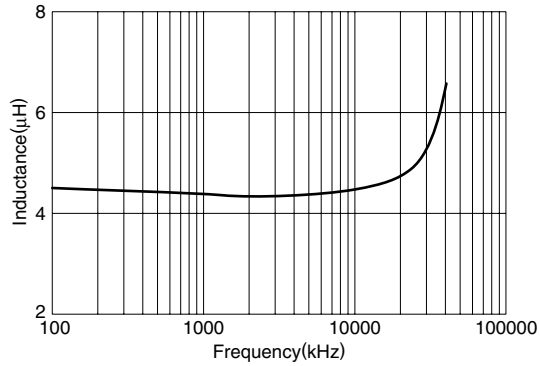

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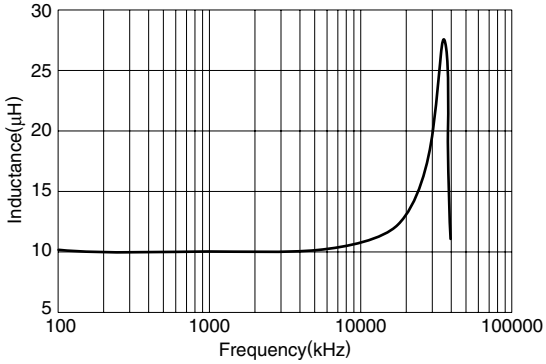
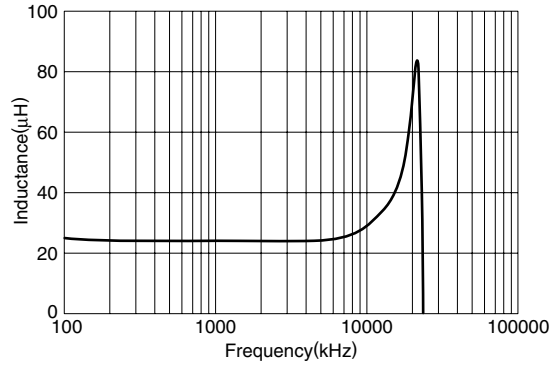


LTF5022T-220MR98

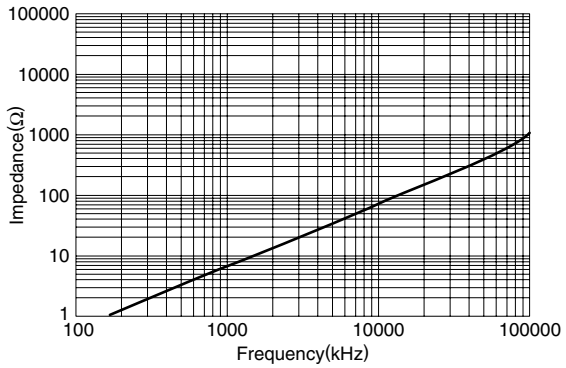


• TEST EQUIPMENT: YHP4194A IMPEDANCE/GAIN-PHASE ANALYZER

TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

LTF5022T-1R2N4R2



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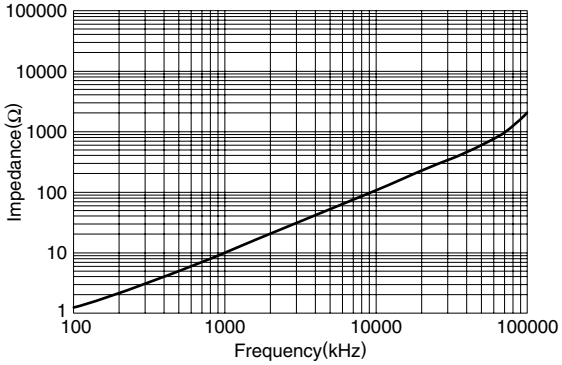

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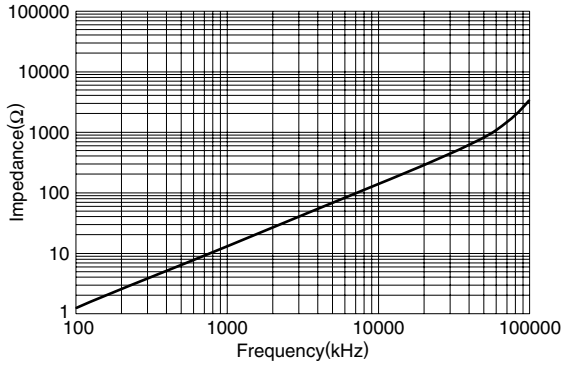

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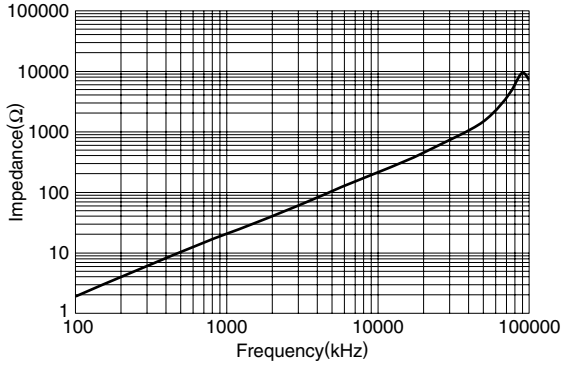

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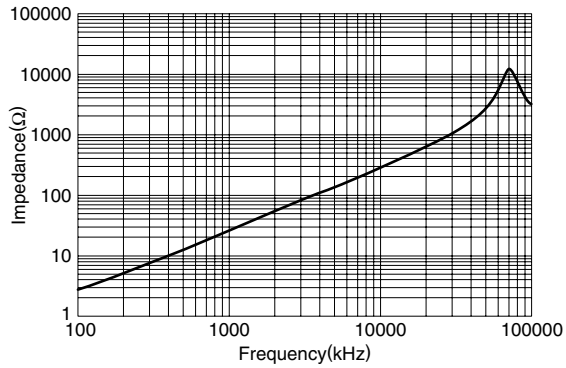
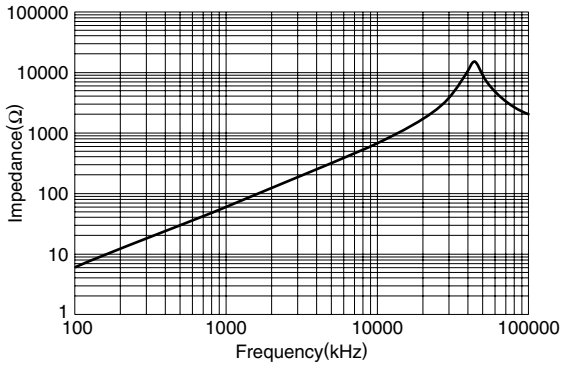


LTF5022T-100M1R4



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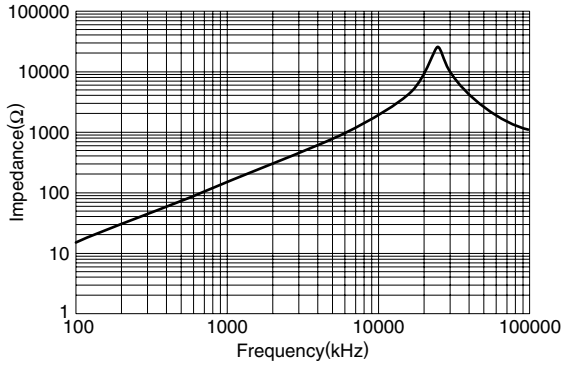
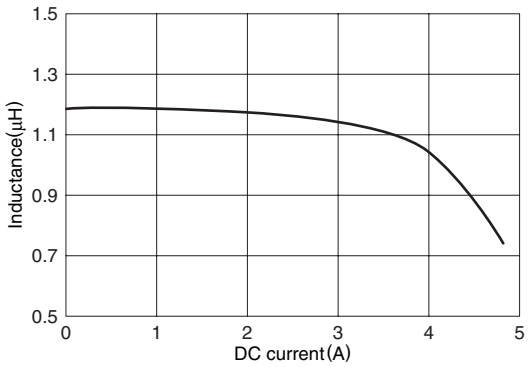


• TEST EQUIPMENT: YHP4194A IMPEDANCE/GAIN-PHASE ANALYZER

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

LTF5022T-1R2N4R2



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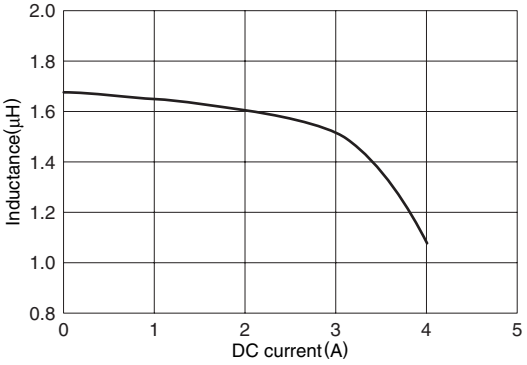

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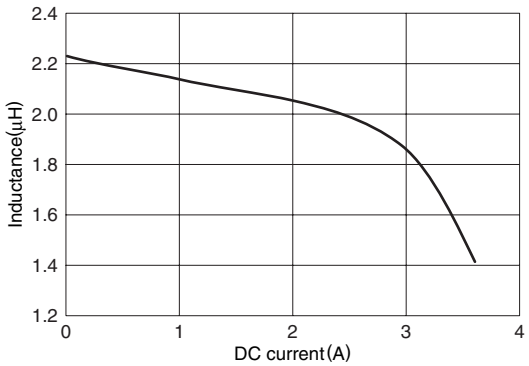

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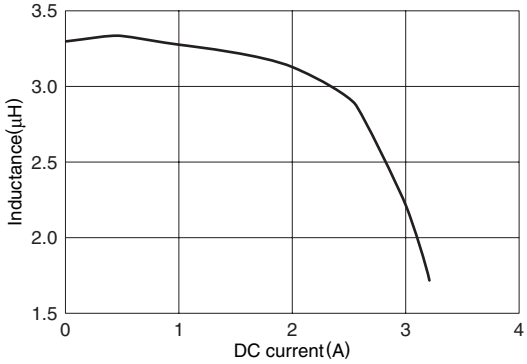
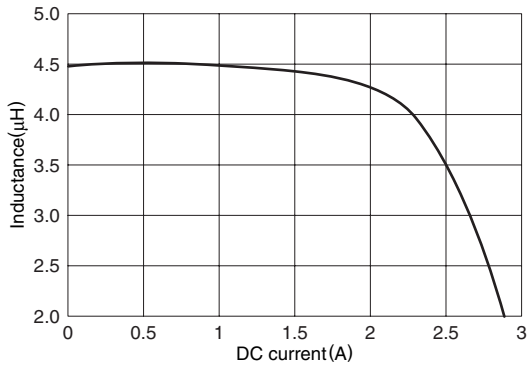
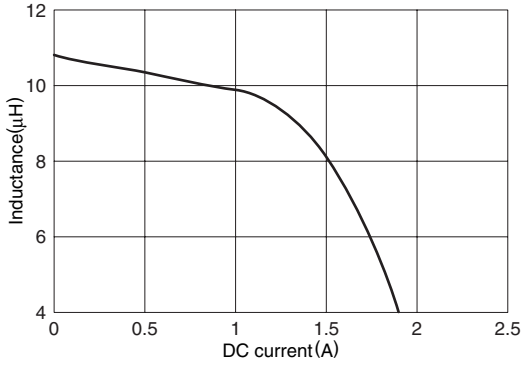


LTF5022T-4R7N2R0



LTF5022T-100M1R4



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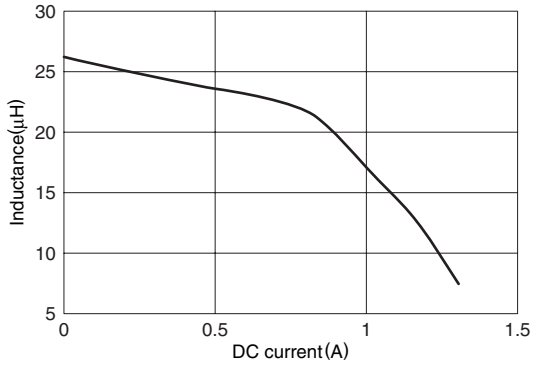

• TEST EQUIPMENT: HP4285A LCR METER(f=100kHz) DC CONSTANT CURRENT SOURCE