

SMD INDUCTOR

SHIELDED

TL-5022T SERIES

FEATURES

- Miniature size
Small footprint: 5.0 x 5.2mm
Low profile: 2.2mm
- Large DC current
- Magnetic shielding
- Available in tape and reel
- Operating temperature: -40°C to $+105^{\circ}\text{C}$
(Including temperature rise)
- Cross to TDK LTF Series LTF5022
- Lead-free process, RoHS compliant

APPLICATIONS

DVCs, DSCs, PDAs, HDDs, LCD displays,
cellular phones, cord-less telephones, etc.

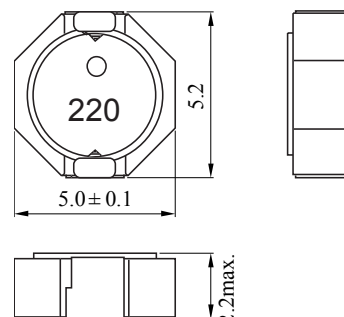
ELECTRICAL CHARACTERISTICS@25°C

Part No.	Inductance (μH)	Inductance tolerance (%)	Test frequency (kHz)	DCR(20°C) (Ω)		Rated current(A)* Based on inductance change Max	Based on temperature rise typ
				Max	Typ		
TL-5022T-1R2N4R2	1.2	± 30	100	0.025	0.021	4.3	4.2
TL-5022T-1R8N3R6	1.8	± 30	100	0.032	0.028	3.6	3.8
TL-5022T-2R2N3R2	2.2	± 30	100	0.040	0.036	3.2	3.4
TL-5022T-3R3N2R5	3.3	± 30	100	0.060	0.054	2.5	2.7
TL-5022T-4R7N2R0	4.7	± 30	100	0.081	0.073	2.0	2.3
TL-5022T-100M1R4	10.0	± 20	100	0.16	0.14	1.4	1.7
TL-5022T-220MR98	22.0	± 20	100	0.32	0.28	0.9	1.2

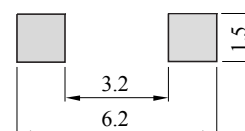
*Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.



DIMENSIONS (mm) Tol: ± 0.25



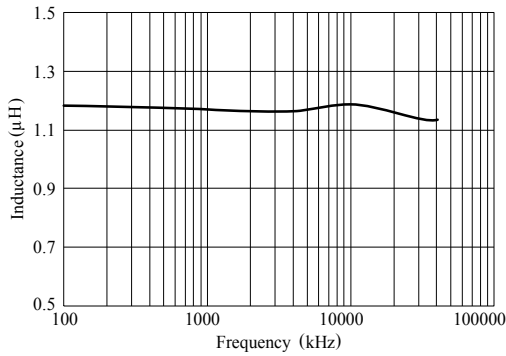
RECOMMENDED PAD LAYOUT



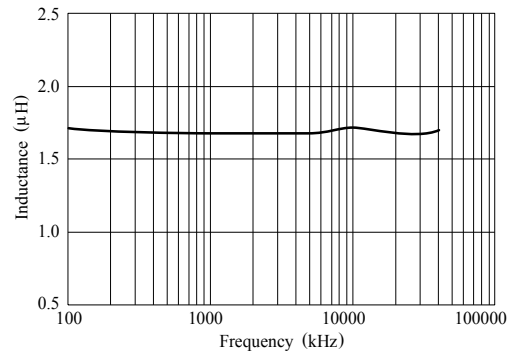
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS

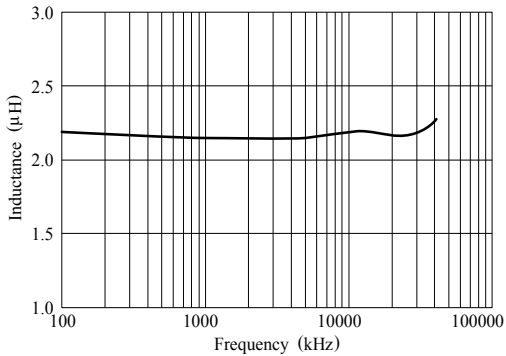
TL-5022T-1R2N4R2



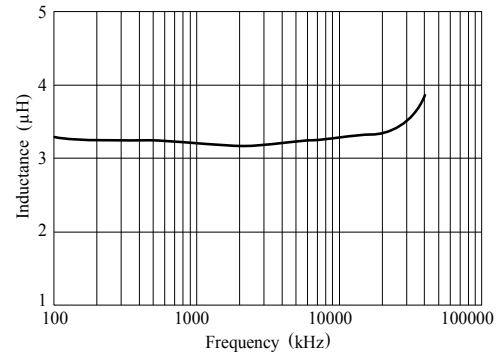
TL-5022T-1R8N3R6



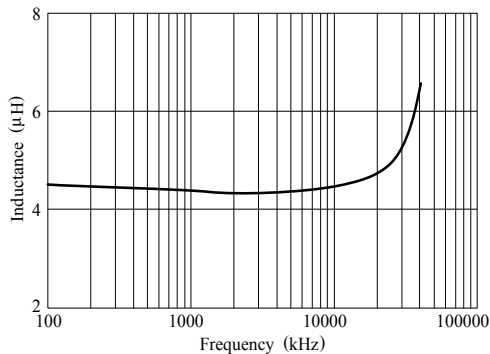
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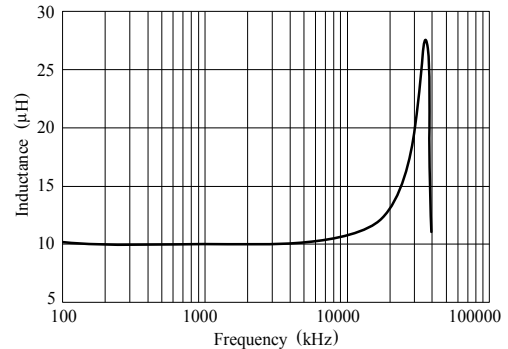
TL-5022T-3R3N2R5



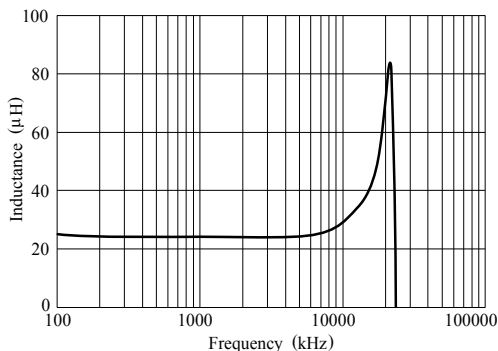
TL-5022T-4R7N2R0



TL-5022T-100M1R4



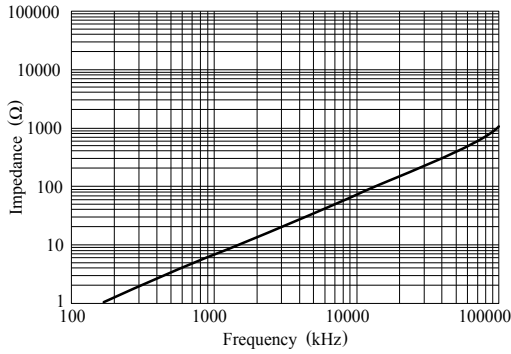
TL-5022T-220MR98



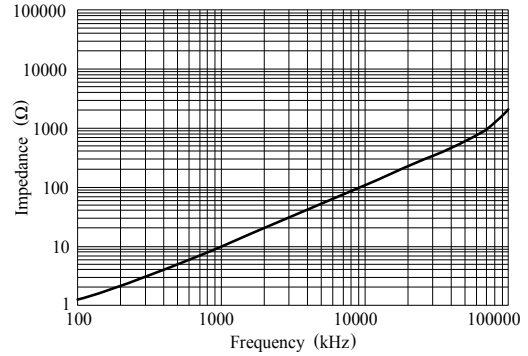
• TEST EQUIPMENT: YHP4194A IMPEDANCE/GAIN-PHASE ANALYZER

TYPICAL ELECTRICAL CHARACTERISTICS
IMPEDANCE vs. FREQUENCY

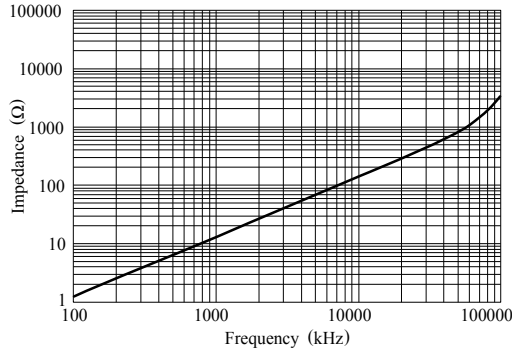
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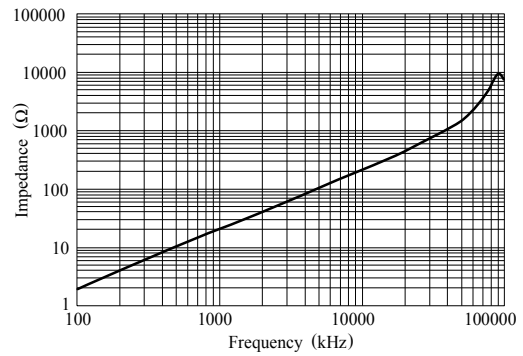
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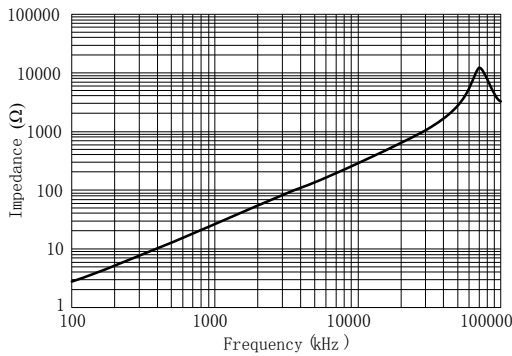
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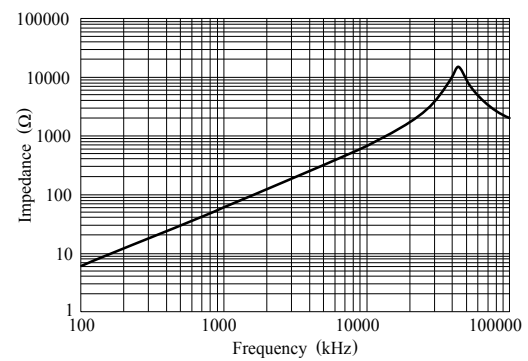
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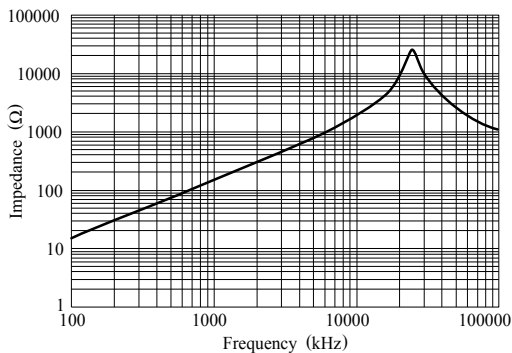
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TL-5022T-100M1R4



TL-5022T-220MR98

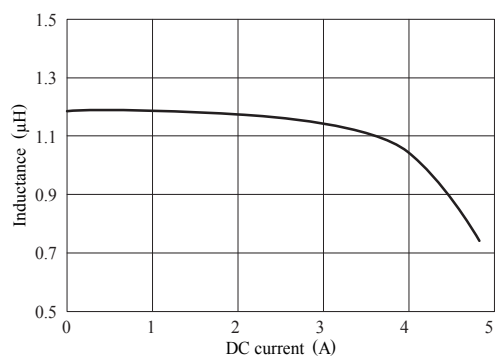


• TEST EQUIPMENT: HP4194A IMPEDANCE/GAIN-PHASE ANALYZER

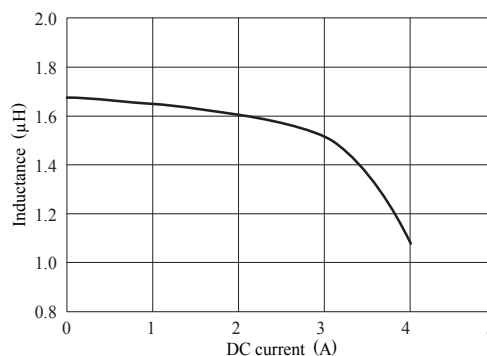
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC CURRENT

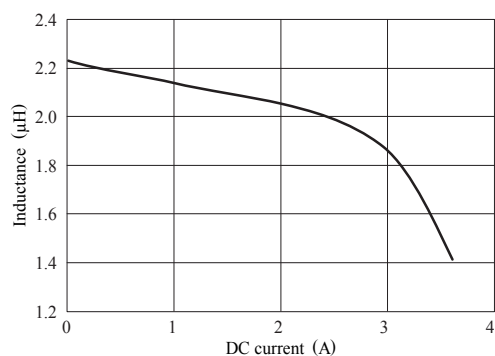
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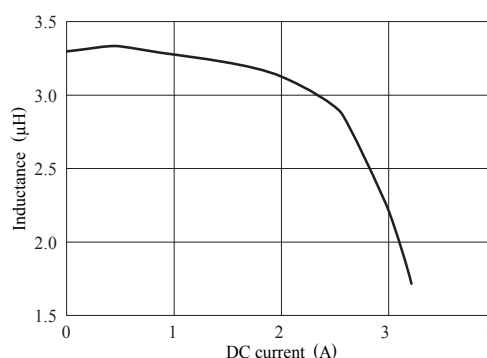
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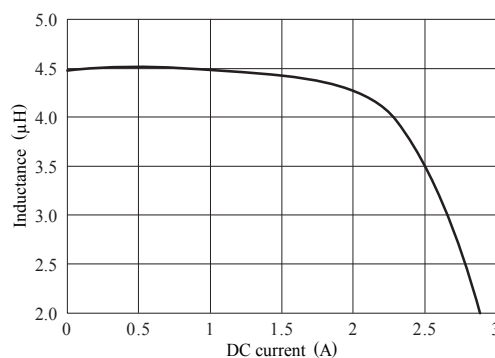
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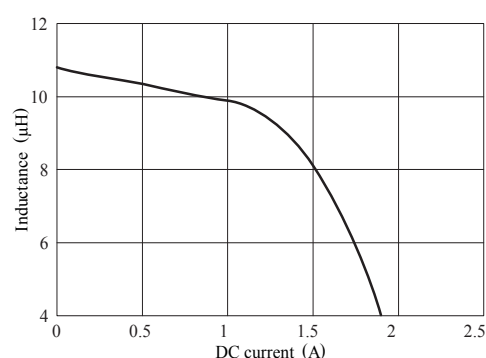
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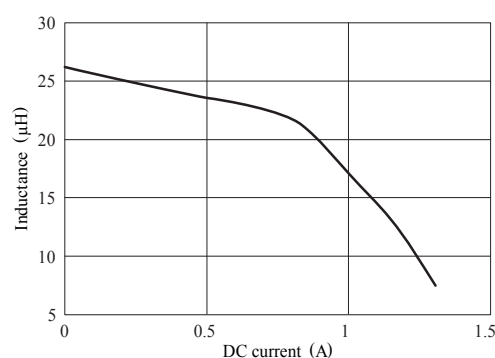
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TL-5022T-100M1R4



TL-5022T-220MR98



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