

Power Inductors

HM72L-0630 Series



Features:

- Operating Temperature Range -55°C to $+125^{\circ}\text{C}$
- Ambient Temperature, Maximum $+85^{\circ}\text{C}$
- Temperature Rise, 40°C
- RoHS Compliant



Description:

HM72L series molded inductors are designed with the latest composite molded core materials to maximize inductance, temperature performance and saturation current while minimizing DC resistance and physical size. The result is a compact, surface mount component that operates in demanding environments with saturation currents up to 60 amps. It is magnetically shielded.

The HM72L series has been designed with operating temperature range from -55°C to $+125^{\circ}\text{C}$. It is ideal for high power density applications where size is critical. HM72L series offer for high efficiency DC-DC converters using high switching frequencies circuit as well as DC input to filter DC output in high temperature environments. This molded inductors deliver clean power in a small and lightweight surface mount package. It has proven performance and reliability levels that ideal for most power industrial applications.

Applications:

- Switching power supplies
- EMI/RFI filtering, output chokes
- Power amplifier circuits
- DC/DC converter

General Note

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TT Electronics | BI Technologies A-1445, Jalan Tanjung Api, 25050
Kuantan, Pahang Darul Makmur, Malaysia
Ph: +60 9 565 8888 www.ttelectronics.com

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Electrical Specifications

Part Number	⁽¹⁾ Inductance ($\mu\text{H} \pm 20\%$) @0A	DCR (m Ω) Typ	DCR (m Ω) Max	SRF (MHz) Ref.	⁽²⁾ I _{rms} (A)	⁽³⁾ I _{sat} (A)
HM72L-0630R10LFTR	0.10	1.5	1.7	214	32.5	60.0
HM72L-0630R15LFTR	0.15	1.9	2.5	152	26.0	52.0
HM72L-0630R20LFTR	0.20	2.4	3.0	137	24.0	41.0
HM72L-0630R22LFTR	0.22	2.5	2.8	117	23.0	40.0
HM72L-0630R33LFTR	0.33	3.5	3.9	80	20.0	30.0
HM72L-0630R47LFTR	0.47	4.0	4.2	60	17.5	26.0
HM72L-0630R56LFTR	0.56	5.0	5.5	63	15.5	25.0
HM72L-0630R68LFTR	0.68	5.0	5.5	57	15.5	25.0
HM72L-0630R82LFTR	0.82	6.7	8.0	49	13.0	24.0
HM72L-06301R0LFTR	1.00	9.0	10.0	44	11.0	22.0
HM72L-06301R5LFTR	1.50	14.0	15.0	38	9.0	18.0
HM72L-06302R2LFTR	2.20	18.0	20.0	29	8.0	14.0
HM72L-06303R3LFTR	3.30	28.0	30.0	21	6.0	13.5
HM72L-06304R7LFTR	4.70	37.0	40.0	19	5.5	10.0
HM72L-06305R6LFTR	5.60	52.0	60.0	16	4.8	10.0
HM72L-06306R8LFTR	6.80	54.0	60.0	15	4.5	8.0
HM72L-06308R2LFTR	8.20	64.0	68.0	12	4.0	7.5
HM72L-0630100LFTR	10.0	102.0	105.0	11	3.0	7.0

Notes: (1) Test condition is 100kHz 1V

(2) I_{rms} is the approximate current at which $\Delta T = 40^\circ\text{C}$

(3) I_{sat} is the saturation current at which inductance rolls off approximately 30% from its initial (zero DC) value.

General Note

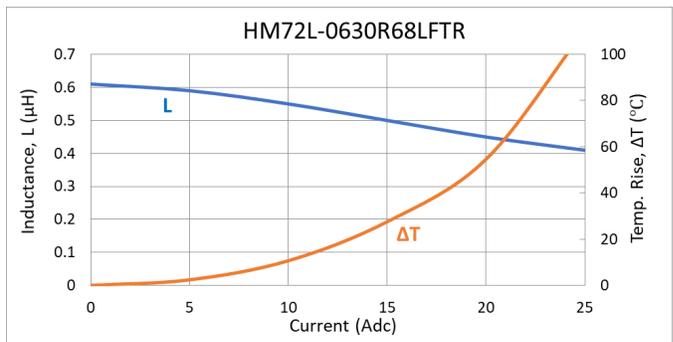
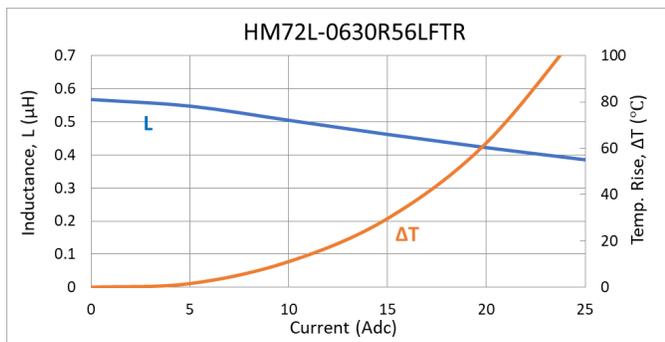
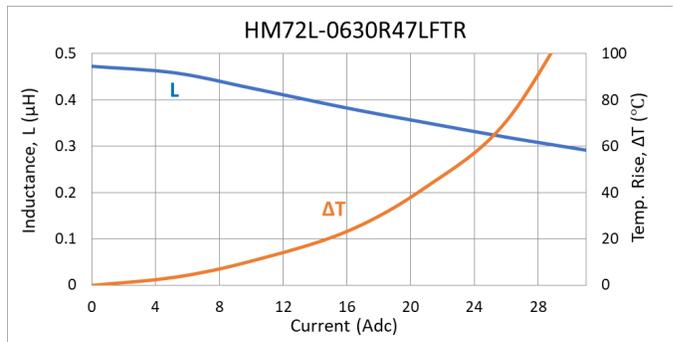
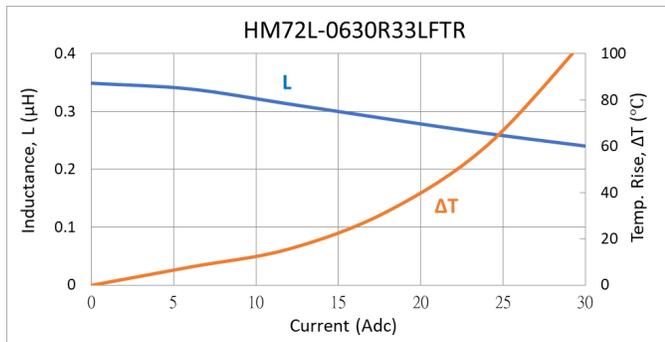
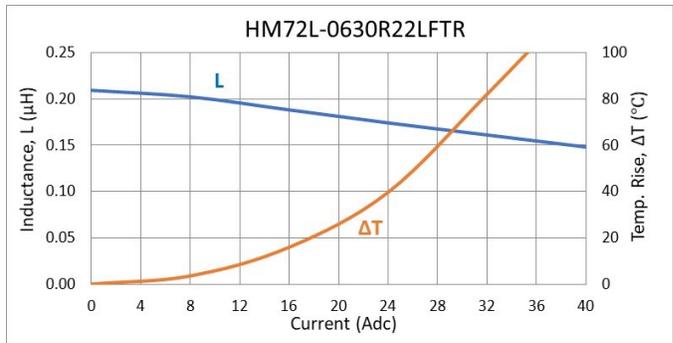
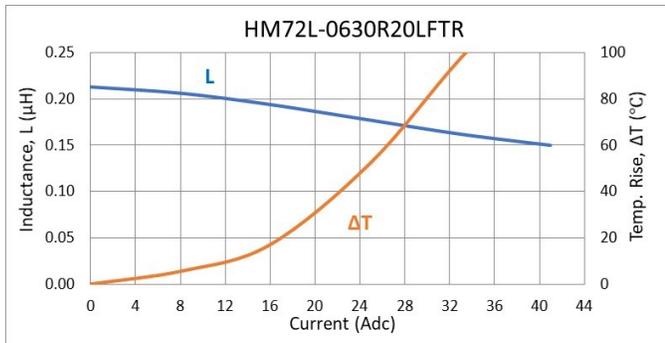
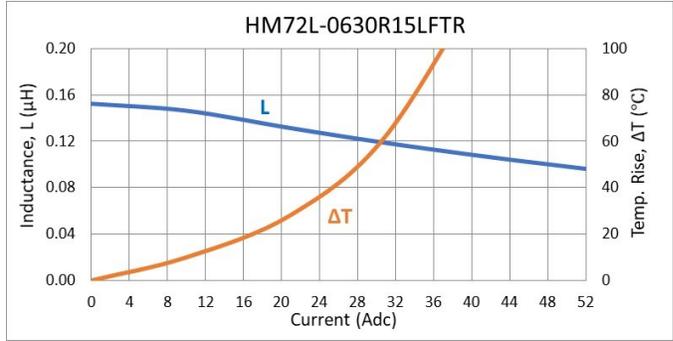
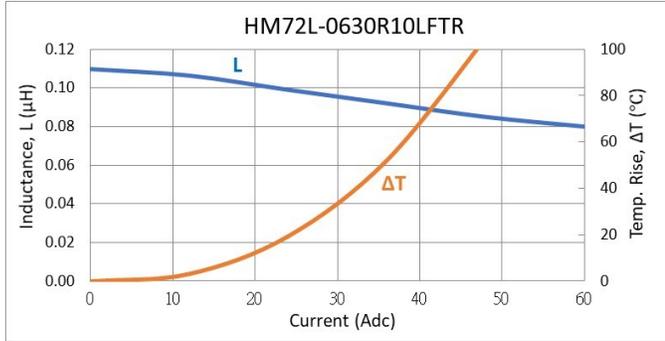
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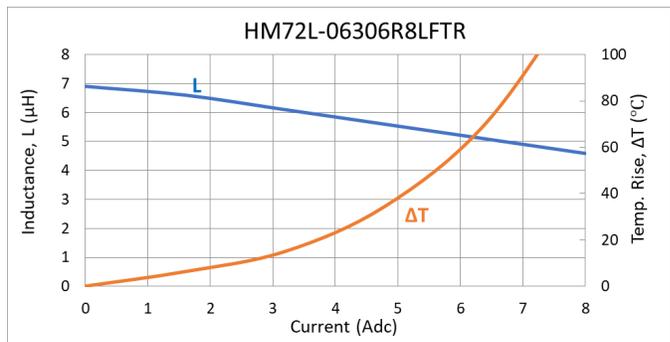
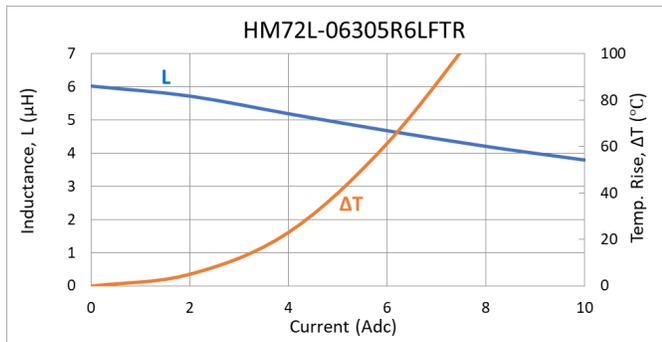
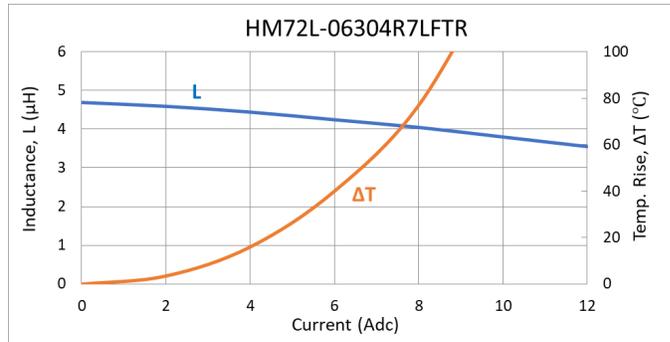
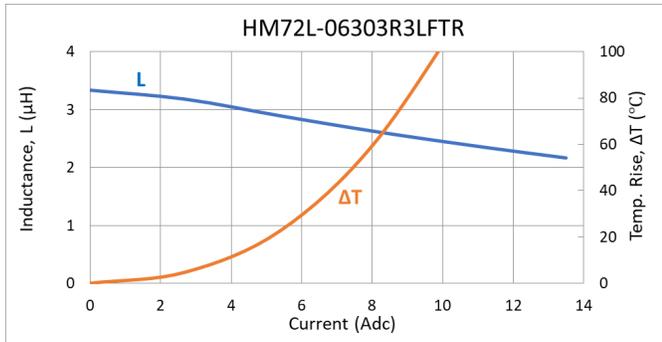
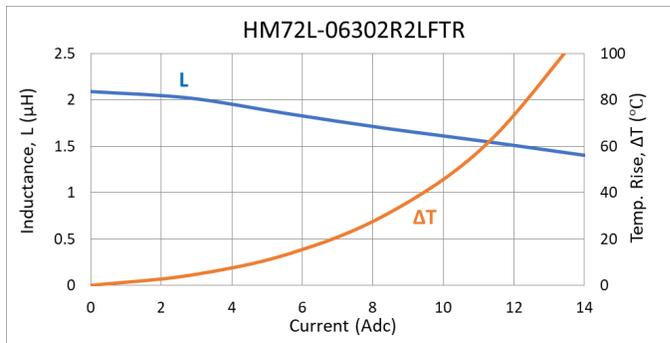
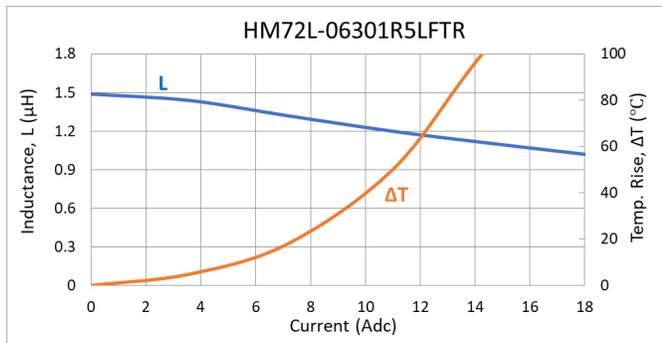
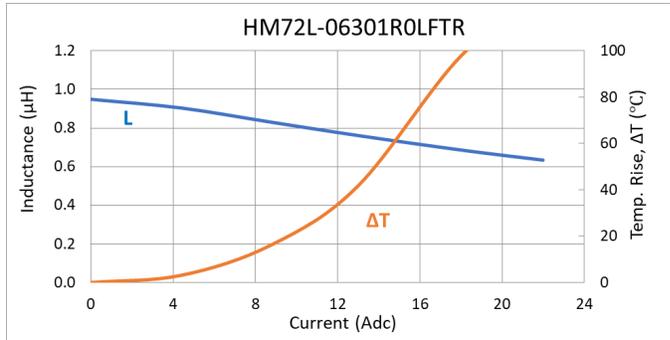
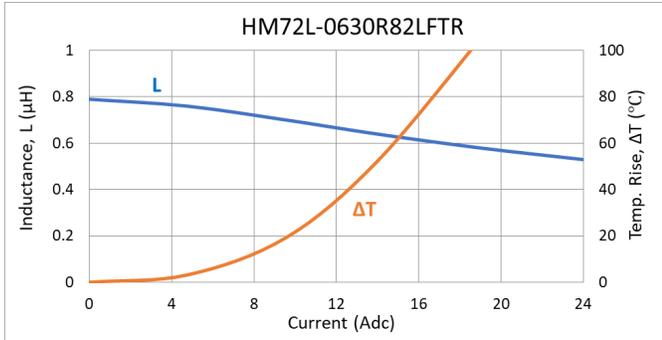
Performance



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Performance



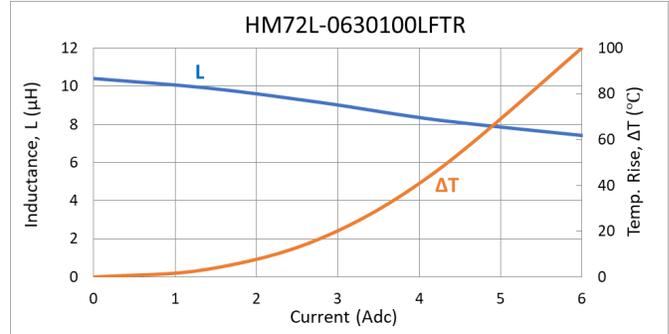
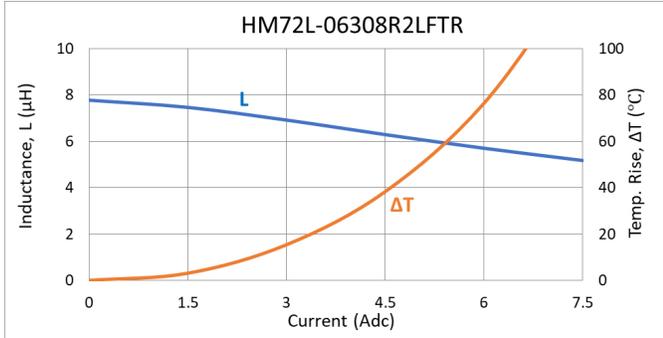
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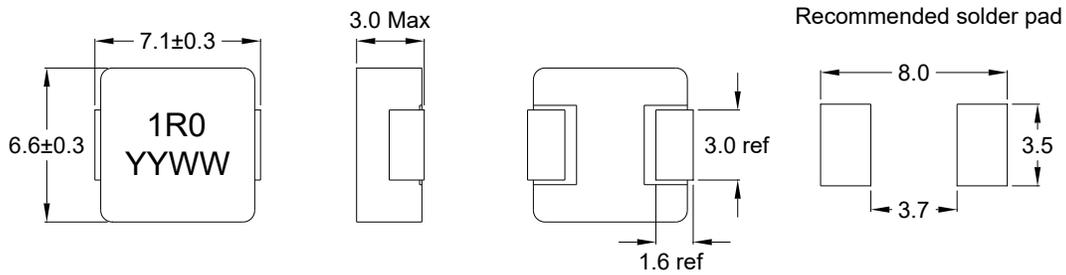
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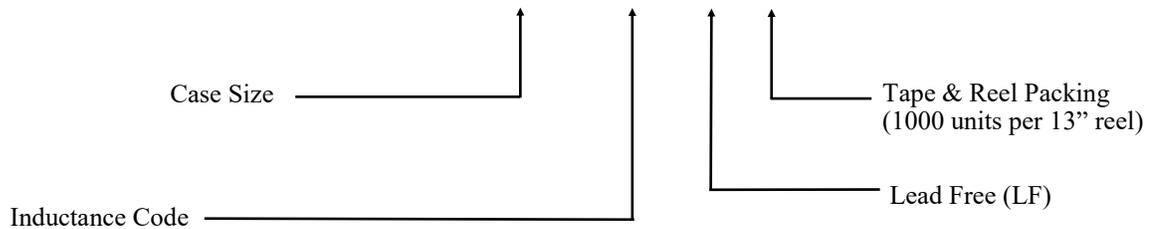


Outline Dimensions (mm)



Ordering Information

HM72L — XXXX XXX LF TR



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