

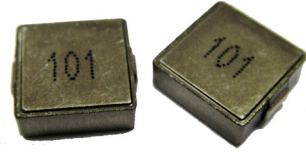
Power Inductors



HA72L-1265 Series

Features:

- Operating Temperature Range -55°C to $+155^{\circ}\text{C}$
- Ambient Temperature, Maximum $+115^{\circ}\text{C}$
- Temperature Rise, 40°C
- RoHS Compliant
- AEC-Q200 Certified



Description:

HA72L series molded inductors are designed with the latest composite molded core materials made from iron alloy core 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 80 amps. It is magnetically shielded.

The HA72L series has been designed as a 155°C high temperature rated molded inductor for high stress environments that require high current saturation levels. It is ideal for high power density applications where size is critical and AEC-Q200 performance is certified.

Due to their iron alloy core properties, HA72L series offers good temperature flux density. They are also ideal for high efficiency DC-DC converters using high switching frequencies up to 3 MHz as well as EMI and low pass DC ripple filters in high temperature environments. Molded inductors deliver clean power in a small, lightweight surface mount package. AEC-Q200 certification assures performance and reliability levels that automotive applications demand.

Applications:

- Transportation
- Lighting
- Engine control
- Transmission control
- Powertrain
- Braking
- Electric power steering

General Note

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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)
HA72L-1265R10LFTR	0.10	0.47	0.50	217	60.0	80.0
HA72L-1265R15LFTR	0.15	0.53	0.60	151	55.0	80.0
HA72L-1265R22LFTR	0.22	0.63	0.70	116	53.0	80.0
HA72L-1265R30LFTR	0.30	0.70	0.80	81	48.0	72.0
HA72L-1265R33LFTR	0.33	0.83	0.90	81	46.0	65.0
HA72L-1265R40LFTR	0.40	0.90	1.00	73	44.0	64.0
HA72L-1265R47LFTR	0.47	1.00	1.20	73	41.0	63.0
HA72L-1265R56LFTR	0.56	1.20	1.40	63	37.0	62.0
HA72L-1265R68LFTR	0.68	1.40	1.60	54	35.0	60.0
HA72L-1265R82LFTR	0.82	1.60	1.90	46	33.0	50.0
HA72L-12651R0LFTR	1.00	1.70	2.00	39	32.0	49.0
HA72L-12651R2LFTR	1.20	2.10	2.50	39	30.0	48.0
HA72L-12651R5LFTR	1.50	2.50	3.00	33	27.0	45.0
HA72L-12651R8LFTR	1.80	2.80	3.20	26	24.0	41.0
HA72L-12652R2LFTR	2.20	3.50	4.20	23	22.0	40.0
HA72L-12652R8LFTR	2.80	4.20	4.80	19	20.0	25.0
HA72L-12653R3LFTR	3.30	5.70	6.80	18	18.0	35.0
HA72L-12654R2LFTR	4.20	5.80	7.20	16	16.0	28.0
HA72L-12654R7LFTR	4.70	9.30	11.20	16	13.5	30.0
HA72L-12655R6LFTR	5.60	11.80	12.80	15	12.0	26.5
HA72L-12656R8LFTR	6.80	13.10	14.00	12	11.5	16.5
HA72L-12658R2LFTR	8.20	14.50	15.50	9	10.5	16.0
HA72L-1265100LFTR	10.0	15.80	16.80	8	10.0	15.5
HA72L-1265120LFTR	12.0	23.00	26.00	-	9.0	14.0
HA72L-1265150LFTR	15.0	25.00	29.00	-	6.0	9.0
HA72L-1265220LFTR	22.0	34.00	39.50	6	5.0	7.5
HA72L-1265330LFTR	33.0	55.00	65.00	5	4.0	6.0
HA72L-1265470LFTR	47.0	80.00	92.00	4	3.0	5.0
HA72L-1265680LFTR	68.0	122.0	134.0	3	2.0	3.5

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.

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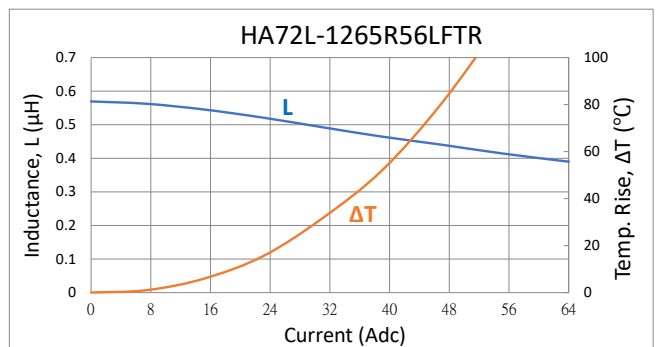
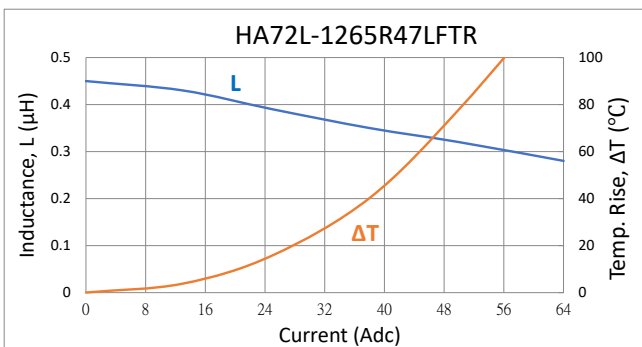
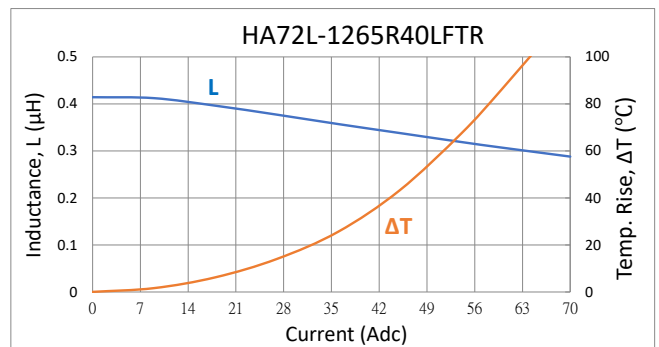
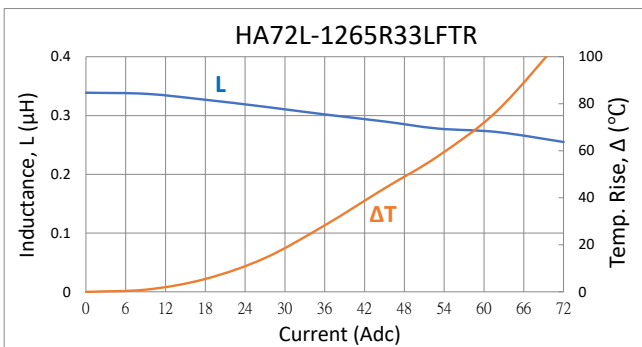
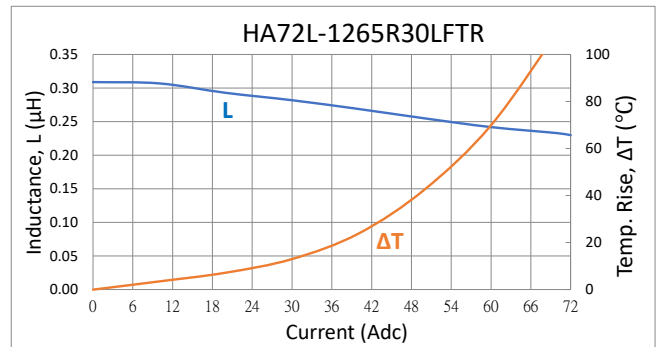
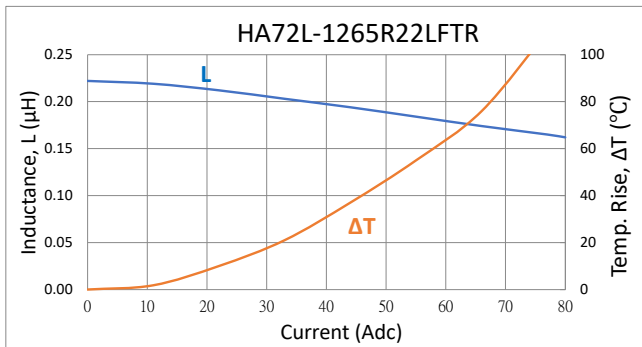
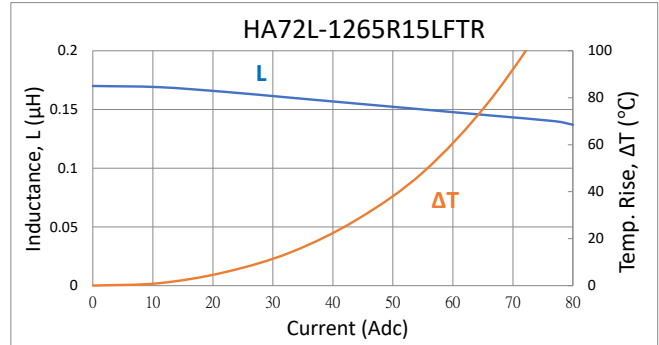
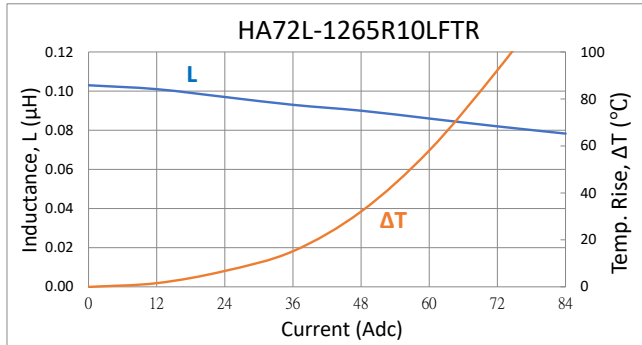
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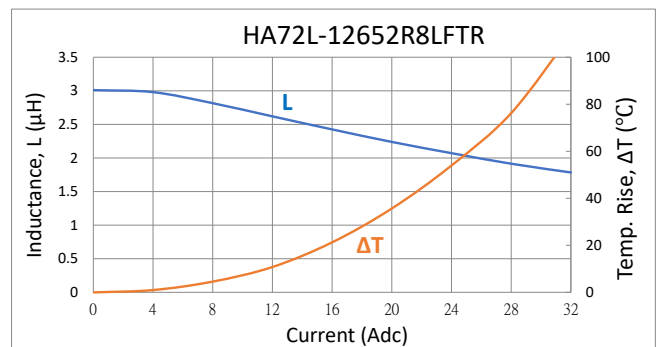
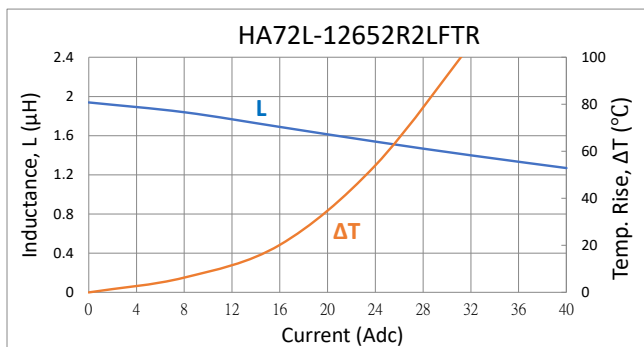
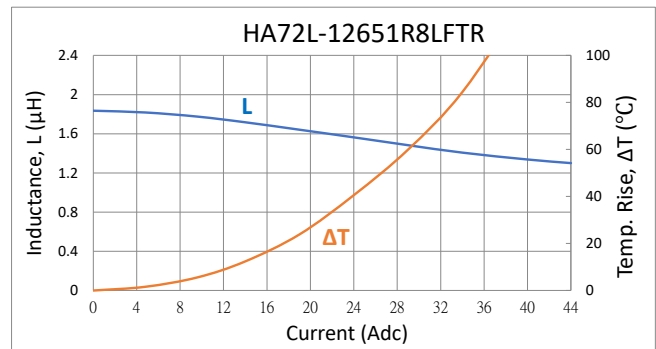
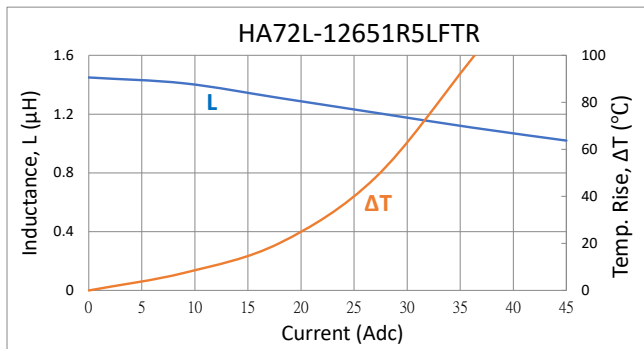
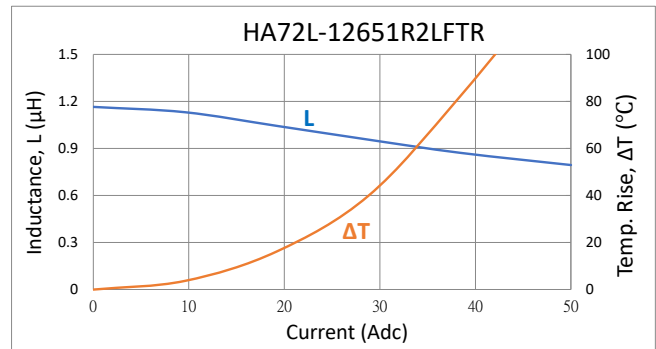
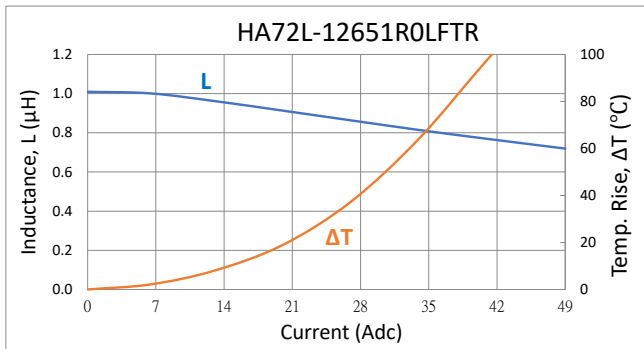
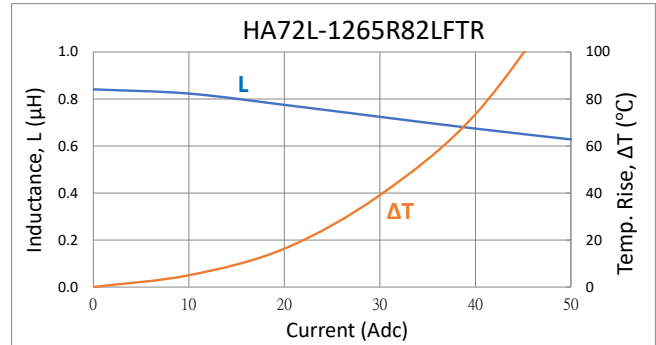
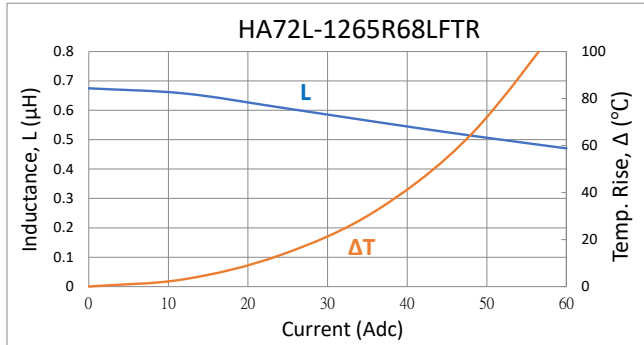
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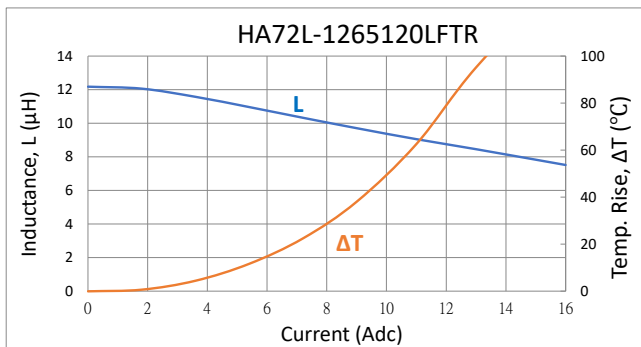
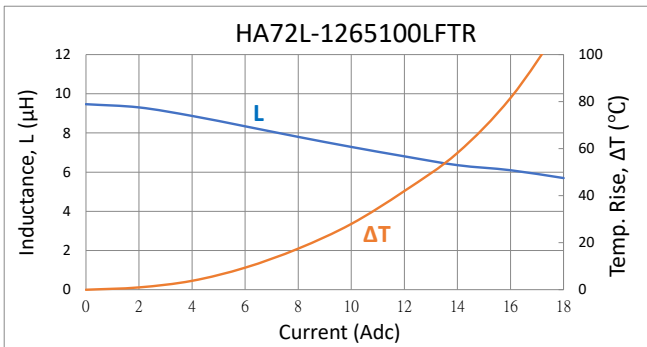
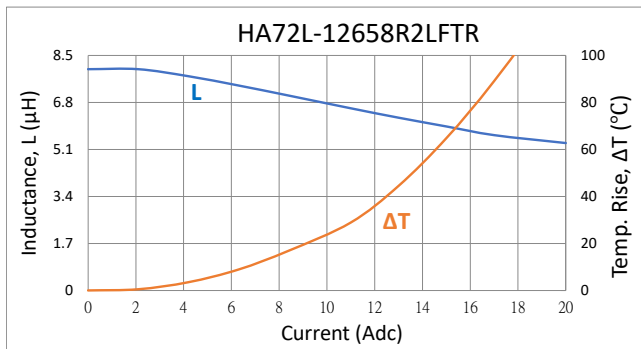
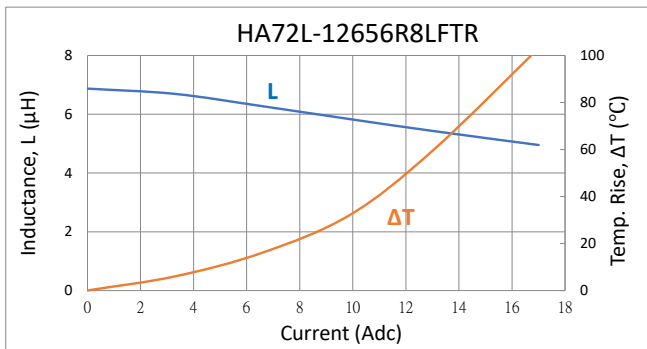
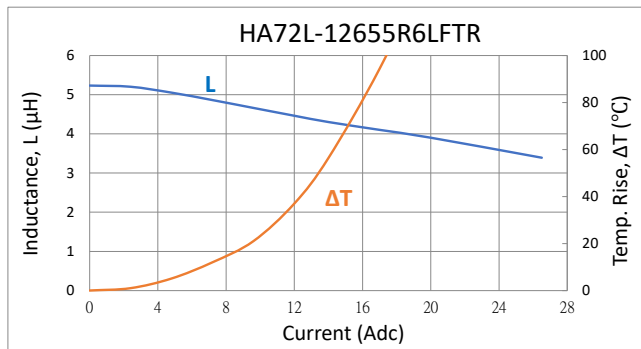
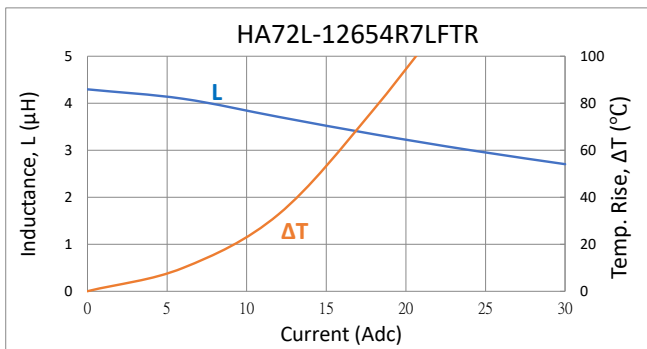
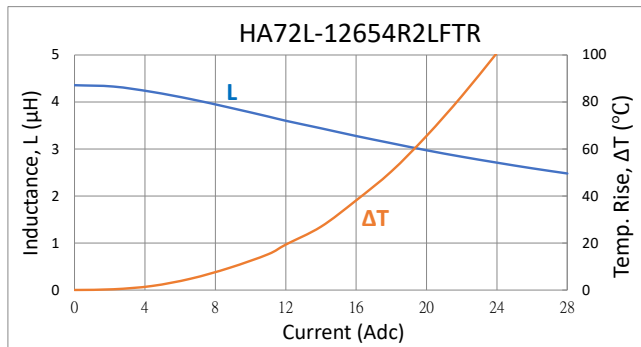
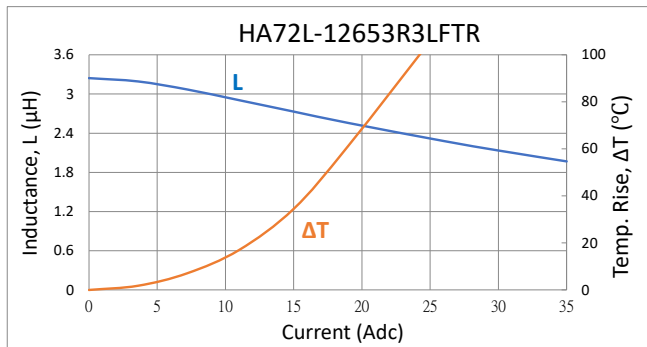
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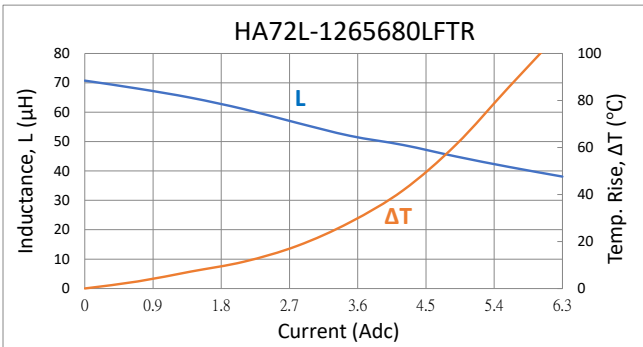
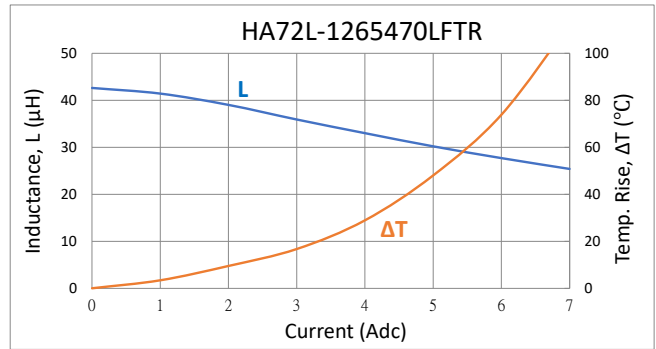
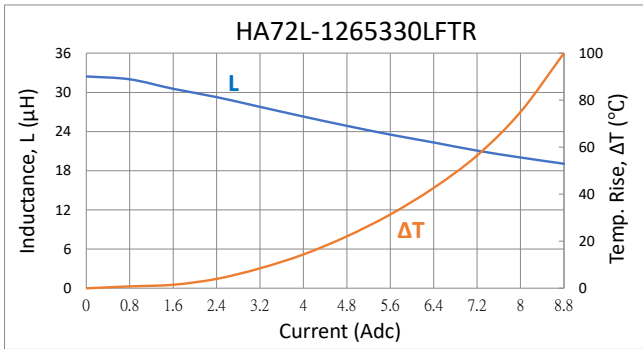
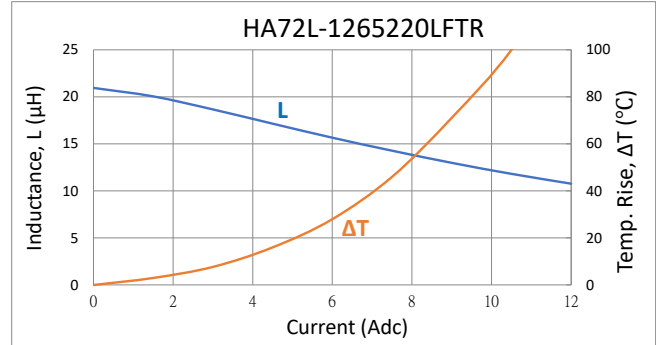
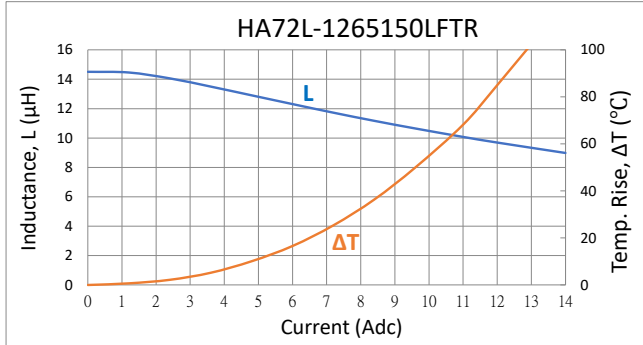
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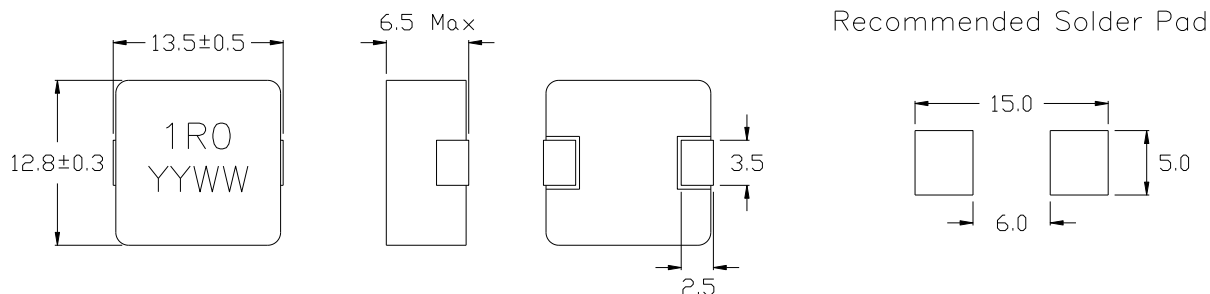
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Power Inductors

HA72L-1265 Series



Outline Dimensions (mm)



Ordering Information

