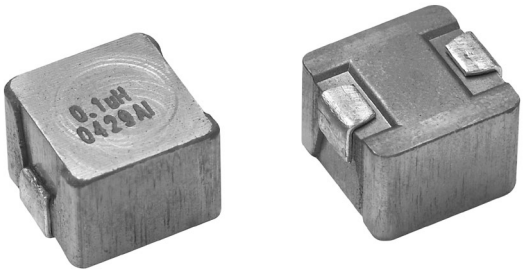
Low Profile, High Current Inductor

Pb-free



FEATURES

- Shielded construction.
- Frequency range up to 5.0MHz.
- Lowest DCR/μH, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- 100% Lead (Pb)-free and RoHS compliant.

APPLICATIONS

- Notebook/Desktop/Server applications.
- High current POL converters.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converters in distributed power systems.
- DC/DC converter for Field Programmable Gate Array (FPGA).

Manufactured under one or more of the following:
US Patents; 6,198,375 / 6,204,744 / 6,449,829 / 6,460,244.
Several foreign patents, and other patents pending.

STANDARD ELECTRICAL SPECIFICATIONS

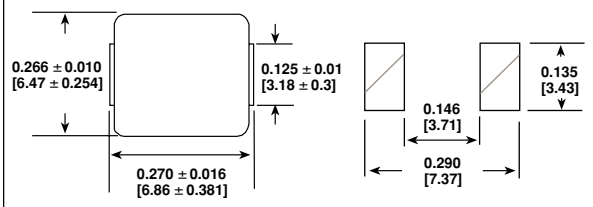
MODEL NUMBER[6]	Lo INDUCTANCE μH ± 20% @100KHz 0.25V, 0A	DCR mΩ TYPICAL 25°C	DCR mΩ MAX 25°C	HEAT RATING CURRENT DC AMPS[4] TYPICAL	SATURATION CURRENT DC AMPS[3] TYPICAL
IHLP-2525EZ-05	0.10	0.81	0.93	33	70
IHLP-2525EZ-05	0.15	1.22	1.40	30	42
IHLP-2525EZ-05	0.22	1.97	2.27	26	41
IHLP-2525EZ-05	0.33	2.55	2.93	22	32
IHLP-2525EZ-05	0.47	2.68	3.08	21	22
IHLP-2525EZ-05	0.56	2.88	3.31	19	20
IHLP-2525EZ-05	0.68	3.94	4.53	17	19
IHLP-2525EZ-05	0.82	4.75	5.46	15	18
IHLP-2525EZ-05	1.0	5.54	6.37	14	17
IHLP-2525EZ-05	1.5	7.30	8.00	12	16
IHLP-2525EZ-05	2.2	11.1	12.2	8	15
IHLP-2525EZ-01	3.3	20.3	22.3	7	13
IHLP-2525EZ-01	4.7	27.7	31.8	6	12
IHLP-2525EZ-01	5.6	32.1	36.9	5	11
IHLP-2525EZ-01	6.8	43.8	48.2	4.5	10
IHLP-2525EZ-01	8.2	60.6	63.5	4	8
IHLP-2525EZ-01	10.0	78.1	85.9	3	7

NOTES:
1. All test data is referenced to 25°C ambient.
2. Operating Temperature Range - 55°C to + 125°C
3. DC current (A) that will cause an approximate ΔT of 40°C.
4. DC current (A) that will cause Lo to drop approximately 20%
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. -05 are lead-frameless terminations. -01 are lead-frame terminations.

DIMENSIONS in inches [millimeters]

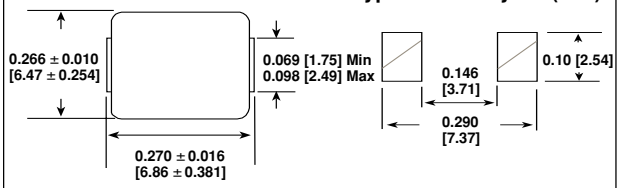
IHLP-2525EZ-01

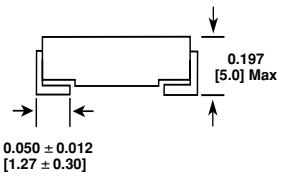
Typical Pad Layout (Min)



IHLP-2525EZ-05

Typical Pad Layout (Min)





DESCRIPTION

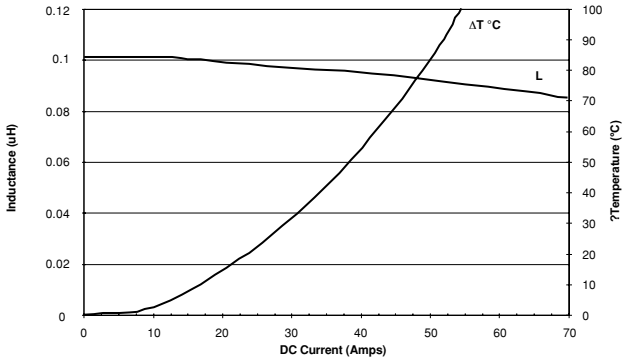
IHLP-2525EZ-05	1.0μH	± 20%	ER	e3
MODEL	**INDUCTANCE VALUE**	**INDUCTANCE TOLERANCE**	**PACKAGE CODE**	**JDEC LEAD FREE STANDARD**

GLOBAL PART NUMBER

I	H	L	P	2	5	2	5	E	Z	E	R	1	R	0	M	0	5
MODEL				SIZE						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

PERFORMANCE GRAPHS

IHLP-2525EZ-05 0.1uH



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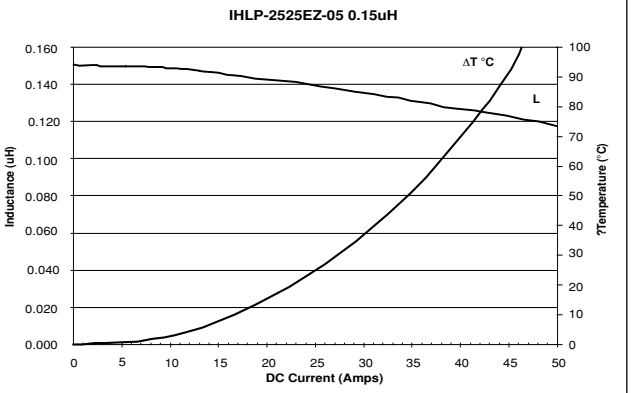

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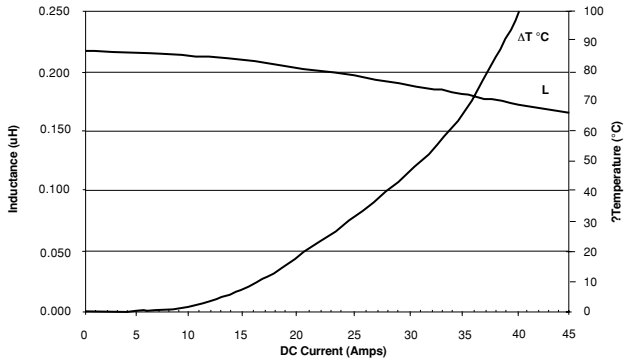

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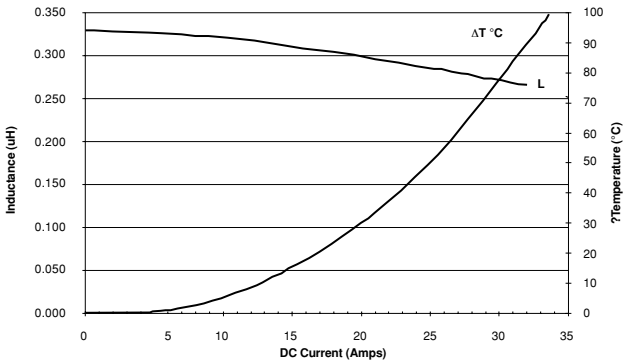

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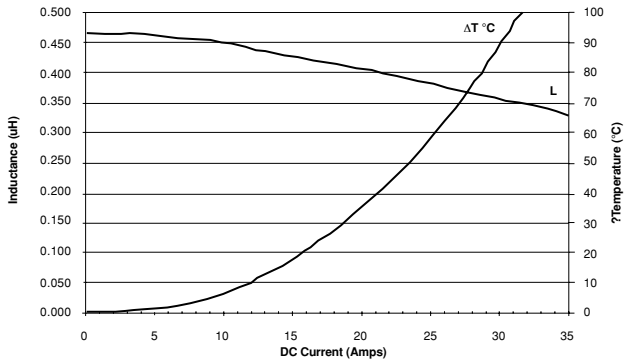

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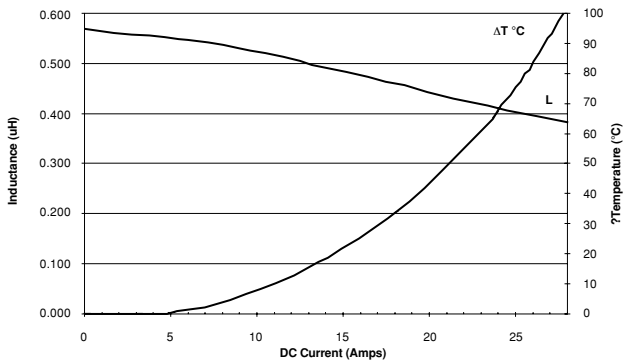

PERFORMANCE GRAPHS

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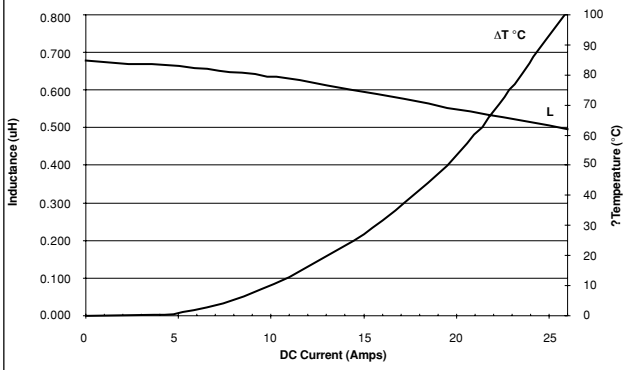

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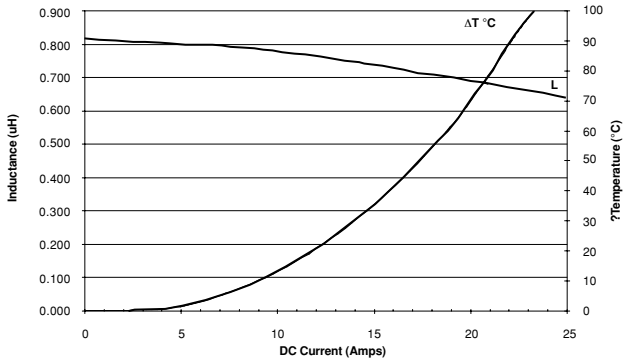

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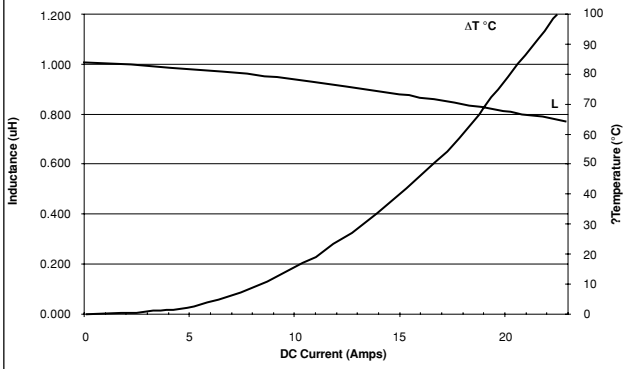

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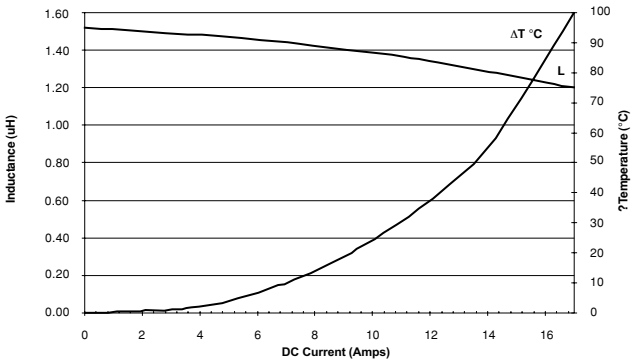

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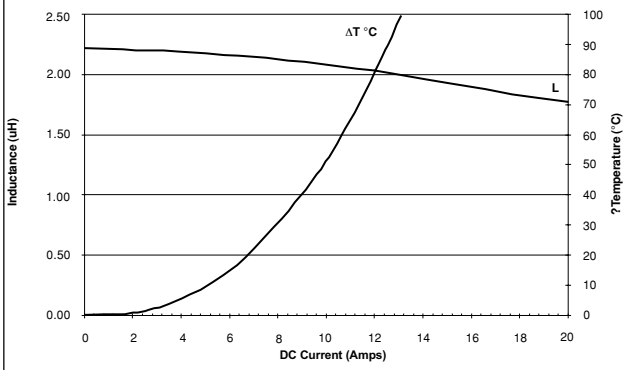

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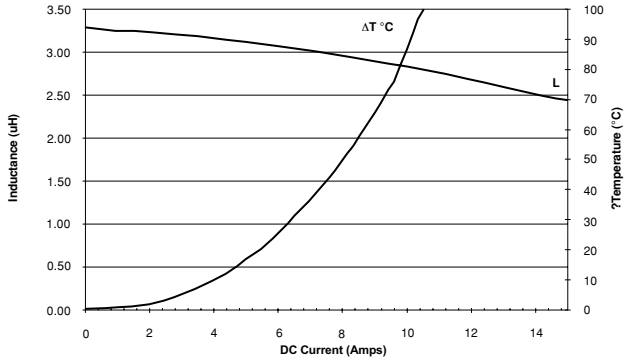

PERFORMANCE GRAPHS

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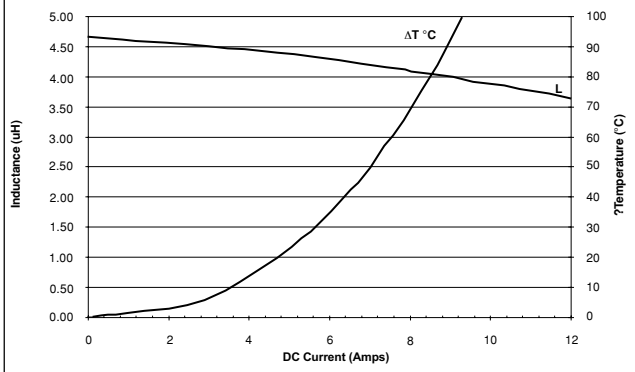

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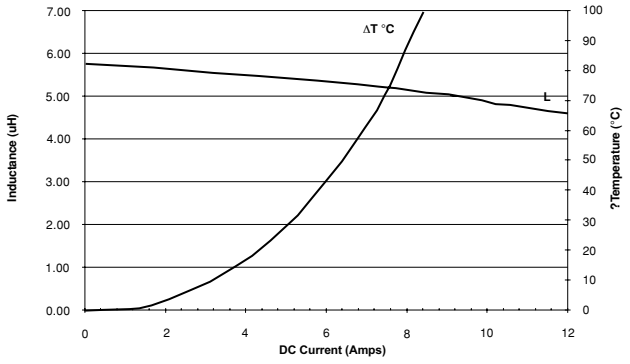

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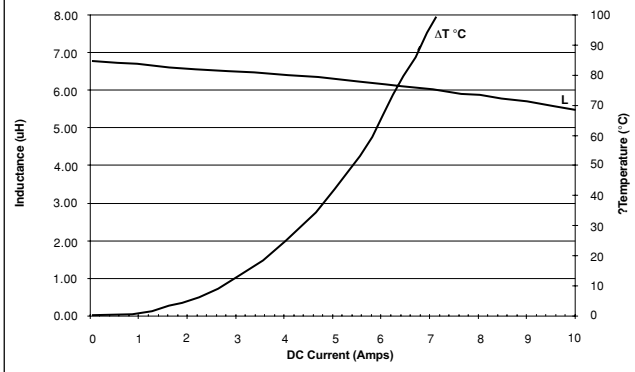

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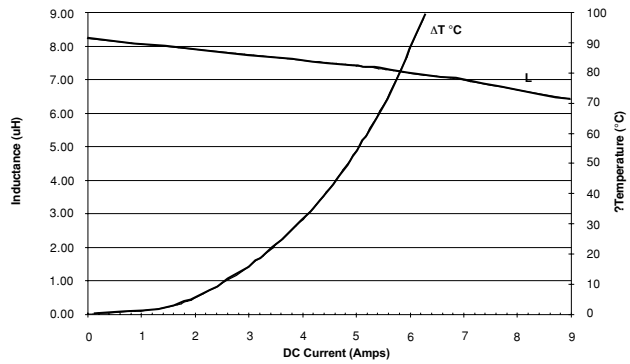

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