



POWER INDUCTORS – Models IHLP-2525CZ-06, IHLP-2525CZ-07 IHLP-5050CE-06, IHLP-5050CE-07



Current-Sense Power Inductors The industry's first 5%-DCR-tolerance parts

FEATURES

- Low profile
- Inductance range:
IHLP-2525CZ-06, IHLP-2525CZ-07: 0.1 μ H to 10 μ H
IHLP-5050CE-06, IHLP-5050CE-07: 0.6 μ H to 10 μ H
- Saturation current* range:
IHLP-2525CZ-06, IHLP-2525CZ-07: 7 Amps to 60 Amps
IHLP-5050CE-06, IHLP-5050CE-07: 14 Amps to 51 Amps
- DCR tolerance:
IHLP-2525CZ-06: 10%, IHLP-2525CZ-07: 5%
IHLP-5050CE-06: 10%, IHLP-5050CE-07: 5%
- Shielded construction
- Fewer components, thus saving board space

APPLICATIONS

- Voltage regulator modules (i.e. VRM10 for next-generation mobile platforms)
- Improved current balance and thermal management in phased power supplies
- Notebook and desktop computers, servers, graphic cards

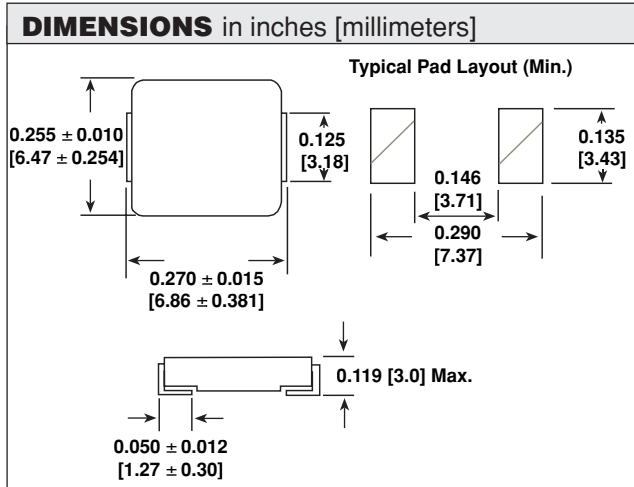
**See reverse for heat rating current range*

DCR Tolerance, Low Profile, Power Inductor

FEATURES

- Lowest height (3.0mm) in this package footprint.
- 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.

IHLP-2525CZ-06 AND IHLP-2525CZ-07



STANDARD ELECTRICAL SPECIFICATIONS			
Lo INDUCTANCE $\mu\text{H} \pm 20\%$ @100KHz, .25V, 0A	DCR m Ω $\pm 10\%/\pm 5\%$ @ 25°C	HEAT RATING CURRENT DC AMPS ³ TYPICAL	SATURATION CURRENT DC AMPS ⁴ TYPICAL
0.10	1.37	32.5	60
0.20	2.34	24	41
0.33	3.20	20	30
0.47	3.86	17.5	26
0.68	5.20	15.5	25
0.82	7.41	13	24
1.0	8.44	11	22
1.5	14.50	9	18
2.2	17.73	8	14
3.3	28.21	6	13.5
4.7	37.11	5.5	10
8.2	61.47	4	7.5
10	97.71	3	7.0

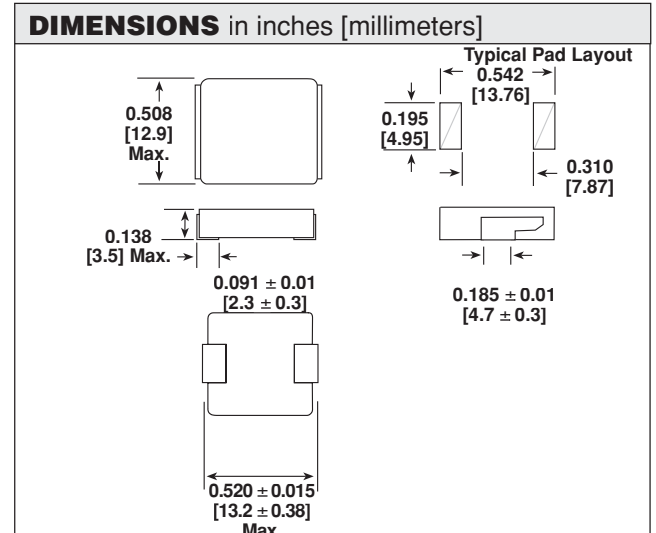
NOTES:

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.

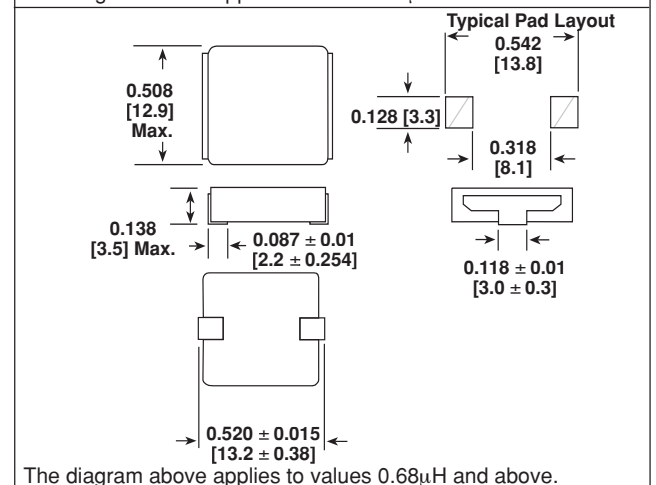
APPLICATIONS

- Tolerance DCR for current sense applications
- Improved current balance in phased power supplies
- Improved thermal management
- PDA/Notebook/Desktop/Server/and battery powered devices
- High current, low profile POL converters
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate arrays

IHLP-5050CE-06 AND IHLP-5050CE-07



The diagram above applies to values 0.6 μH and below.



The diagram above applies to values 0.68 μH and above.

STANDARD ELECTRICAL SPECIFICATIONS			
Lo INDUCTANCE $\mu\text{H} \pm 20\%$ @100KHz, .25V, 0A	DCR m Ω $\pm 10\%/\pm 5\%$ @ 25°C	HEAT RATING CURRENT DC AMPS ³ TYPICAL	SATURATION CURRENT DC AMPS ⁴ TYPICAL
0.60	1.85	29	51
0.68	2.34	28	49
1.0	3.21	24	40
1.5	4.97	19	35
2.2	7.20	16	29
3.3	10.69	12	27
4.7	14.27	10	24
5.6	18.19	9.5	19
10	30.86	7	14