

IHLP3232DZERR22M5A Datasheet

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DiGi Electronics Part Number IHLP3232DZERR22M5A-DG

Manufacturer Vishay Dale

Manufacturer Product Number IHLP3232DZERR22M5A

Description FIXED IND 220NH 36A 1.86MOHM SMD

Detailed Description 220 nH Shielded Molded Inductor 36 A 1.86mOhm

Max Nonstandard



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RFQ Email: Info@DiGi-Electronics.com

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Purchase and inquiry

| Manufacturer Product Number: | Manufacturer: |
|---------------------------------------|------------------------------|
| IHLP3232DZERR22M5A | Vishay Dale |
| Series: | Product Status: |
| IHLP-3232DZ-5A | Active |
| Type: | Material - Core: |
| Molded | |
| Inductance: | Tolerance: |
| 220 nH | ±20% |
| Current Rating (Amps): | Current - Saturation (Isat): |
| 36 A | 32A |
| Shielding: | DC Resistance (DCR): |
| Shielded | 1.86mOhm Max |
| Q @ Freq: | Frequency - Self Resonant: |
| | 117MHz |
| Ratings: | Operating Temperature: |
| AEC-Q200 | -55°C ~ 125°C |
| Inductance Frequency - Test: | Mounting Type: |
| 100 kHz | Surface Mount |
| Package / Case: | Supplier Device Package: |
| Nonstandard | |
| Size / Dimension: | Height - Seated (Max): |
| 0.322" L x 0.322" W (8.18mm x 8.18mm) | 0.157" (4.00mm) |

Environmental & Export classification

8504.50.4000

| RoHS Status: | Moisture Sensitivity Level (MSL): |
|------------------|-----------------------------------|
| ROHS3 Compliant | 1 (Unlimited) |
| REACH Status: | ECCN: |
| REACH Unaffected | EAR99 |
| HTSUS: | |





Vishay Dale

AUTOMOTIVE

RoHS

COMPLIANT

HALOGEN FREE

GREEN

<u>(5-2008)</u>

IHLP® Automotive Inductors, High Temperature (155 °C) Series



LINKS TO ADDITIONAL RESOURCES







FEATURES

- Magnetically shielded construction
- Operating temperature up to 155 °C
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- IHLP design; PATENT(S): <u>www.vishay.com/patents</u>
- Material categorization: for definitions of compliance please see <u>www.vishav.com/doc?99912</u>



- Engine and transmission control units
- · Diesel injection drivers
- DC/DC converters for entertainment / navigation systems
- Noise suppression for motors: windshield wipers / power seats / power mirrors / heating and ventilation blower / HID lighting
- LED drivers

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | |
|------------------------------------|--|-------------------|-------------------|-----------------------------------|--------------------------------------|---------------|----------|
| | L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A | DCR TYP. 25 °C | DCR MAX. 25 °C | HEAT RATING CURRENT DC TYP. | SATURATION CURRENT DC TYP. (A) | | SRF TYP. |
| PART NUMBER | (μH) | (m Ω) | (m Ω) | (A) ⁽¹⁾ | 20 % DROP (2) | 30 % DROP (3) | (MHz) |
| IHLP3232DZERR22M5A | 0.22 | 1.68 | 1.86 | 36 | 32 | 44 | 117 |
| IHLP3232DZERR47M5A | 0.47 | 2.38 | 2.55 | 27 | 19 | 24 | 77 |
| IHLP3232DZERR68M5A | 0.68 | 3.3 | 3.53 | 21.5 | 12 | 17 | 51 |
| IHLP3232DZERR82M5A | 0.82 | 3.7 | 4 | 20 | 15 | 22 | 49 |
| IHLP3232DZER1R0M5A | 1.0 | 4.58 | 4.9 | 19 | 15 | 22 | 45 |
| IHLP3232DZER1R5M5A | 1.5 | 6.78 | 7.25 | 15.5 | 14 | 20 | 35 |
| IHLP3232DZER2R2M5A | 2.2 | 11.7 | 12.5 | 11.5 | 14 | 20 | 32 |
| IHLP3232DZER3R3M5A | 3.3 | 15.4 | 16.48 | 10.6 | 11.8 | 16 | 23 |
| IHLP3232DZER4R7M5A | 4.7 | 26.6 | 28.46 | 7.2 | 9.1 | 12 | 18 |
| IHLP3232DZER5R6M5A | 5.6 | 29.6 | 31.67 | 6.9 | 9 | 12 | 18 |
| IHLP3232DZER6R8M5A | 6.8 | 33.5 | 35.9 | 6.8 | 6.3 | 9.2 | 15.3 |
| IHLP3232DZER100M5A | 10 | 50 | 53.5 | 5.1 | 5.2 | 7 | 13 |
| IHLP3232DZER150M5A | 15 | 62 | 66.34 | 4.8 | 3.6 | 4.5 | 10 |
| IHLP3232DZER220M5A | 22 | 103 | 110.21 | 3.7 | 3.8 | 5 | 9 |
| IHLP3232DZER330M5A | 33 | 149 | 159.43 | 3.1 | 3.2 | 4.2 | 6.1 |

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °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
- Rated operating voltage (across inductor) = 75 V
- ⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C
- DC current (A) that will cause L_0 to drop approximately 20 %
- $^{(3)}$ DC current (A) that will cause L_0 to drop approximately 30 %

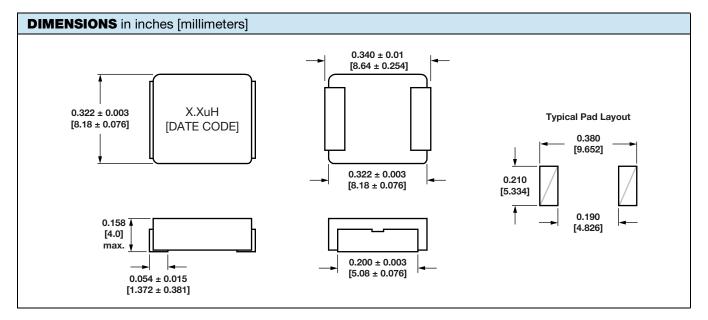
PATENT(S): www.vishay.com/patents

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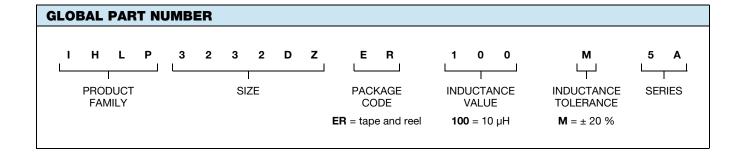
Revision: 19-Sep-2023 **1** Document Number: 34336 For technical questions, contact: <u>magnetics@vishay.com</u>



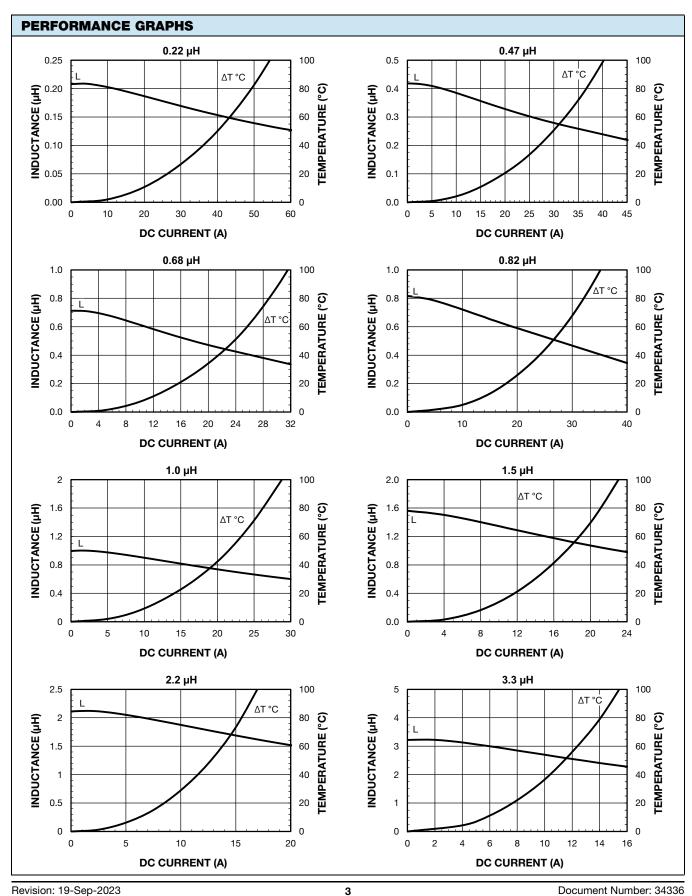




| DESCRIPTION | | | | | | | |
|----------------|------------------|----------------------|--------------|--------------------------------|--|--|--|
| IHLP-3232DZ-5A | 10 μH | ± 20 % | ER | E3 | | | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD | | | |

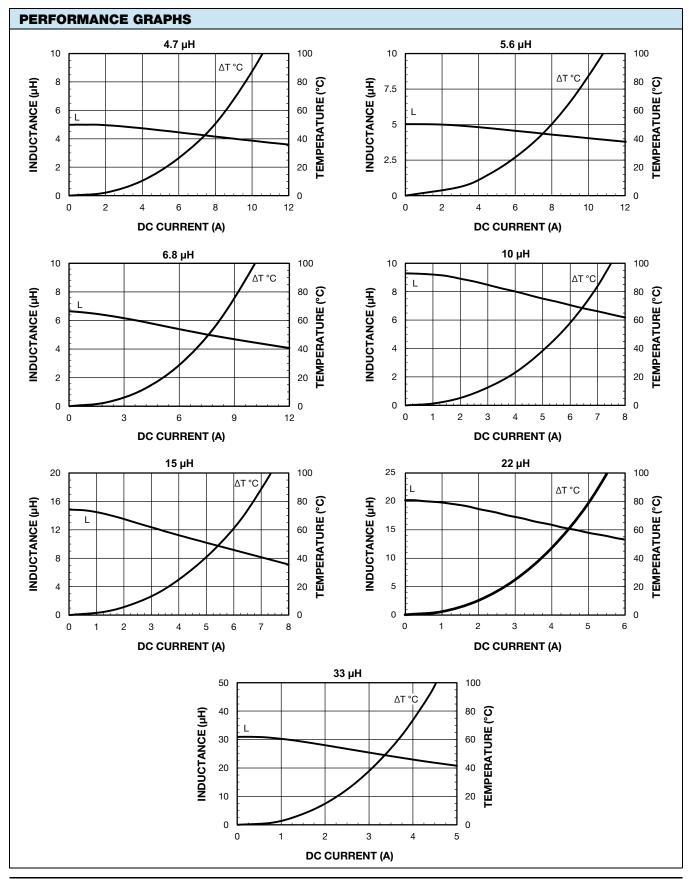




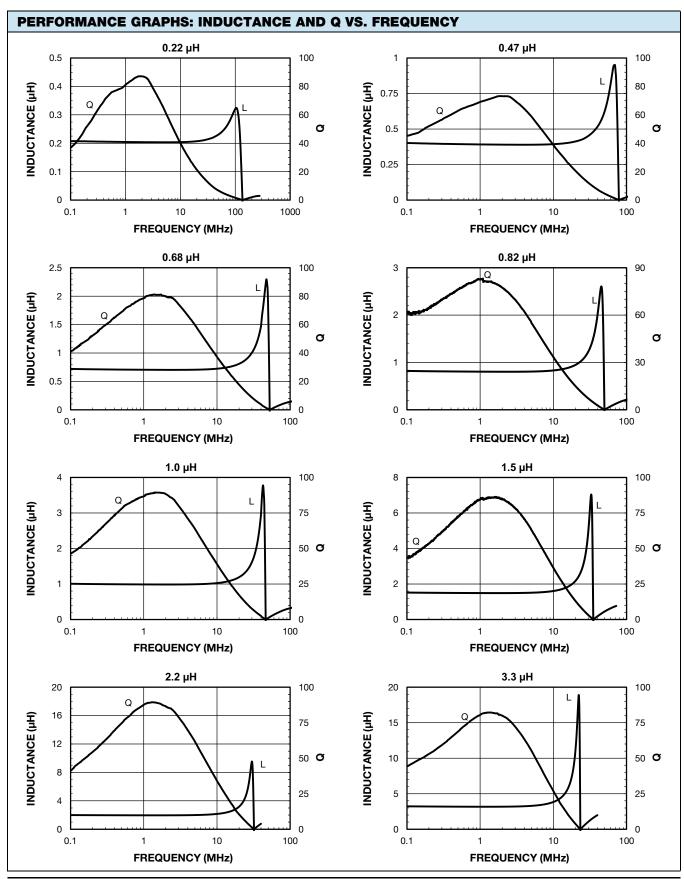








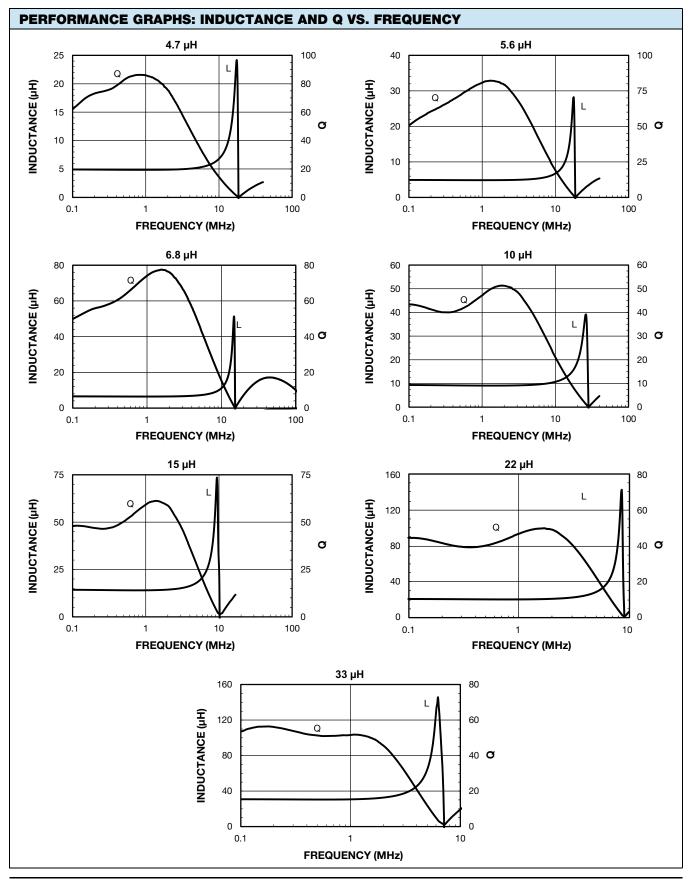




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