

# IHD3AC222L Datasheet



The DNA of tech.®

<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	IHD3AC222L-DG
Manufacturer	<a href="#">Vishay Dale</a>
Manufacturer Product Number	IHD3AC222L
Description	FIXED IND 2.2MH 500MA 1.76OHM TH
Detailed Description	2.2 mH Unshielded Drum Core, Wirewound Inductor 500 mA 1.76Ohm Max Axial



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.





## Purchase and inquiry

Manufacturer Product Number:

IHD3AC222L

Series:

IHD

Manufacturer:

Vishay Dale



## Filter Inductors, High Current, Axial Leaded



### ELECTRICAL SPECIFICATIONS

**Inductance:** Measured at 1.0 V with zero DC current

**Incremental Current:** The typical current at which the inductance will be decreased by 5 % from its initial zero DC value

**Dielectric Rating:** 2500 V<sub>RMS</sub> between winding and outer circumference to within 0.250" [6.35 mm] of the insulating sleeve edge

**Operating Temperature:** - 55 °C to + 125 °C (no load),  
- 55 °C to + 85 °C (at full rated current)

**Current Rating:** Maximum continuous operating current (DC or RMS) based on a 40 °C temperature rise

### FEATURES

- Printed circuit mounting (axial leads)
- Protected by polyolefin tubing
- High saturation bobbin used allowing high inductance with low DC resistance
- Pre-tinned leads
- High resistivity core offers very high parallel resistance, resulting in maximum coil performance
- 20 sleeveless models available at reduced cost
- Compliant to RoHS Directive 2002/95/EC



RoHS  
COMPLIANT

### MECHANICAL SPECIFICATIONS

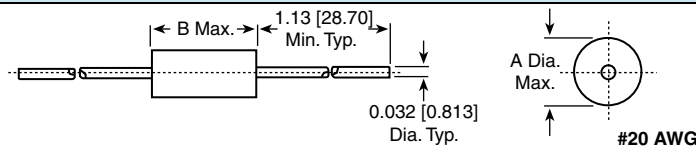
**Wire:** Solid soft copper

**Terminals:** 20 AWG tinned copper leads

**Core Material:** Ferrite

**Coating:** Polyolefin tubing - flame retardant UL type VW-1 per MIL-I-23053/5, class 3 requirements

### DIMENSIONS in inches [millimeters]



MODEL	A (MAX.)	B (MAX.)
IHD-1	0.270 [6.85]	0.700 [17.78]
IHD-3	0.460 [11.68]	0.900 [22.86]

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. AT 1 kHz (μH)	TOL. (%)	DCR MAX. (Ω)	RATED DC CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
IHD-1	1	± 15 %	0.009	5.3	7.00
IHD-1	1.2	± 15 %	0.010	5.0	6.40
IHD-1	1.5	± 15 %	0.011	4.8	5.70
IHD-1	1.8	± 15 %	0.012	4.6	5.20
IHD-1	2.2	± 15 %	0.013	4.4	4.70
IHD-1	2.7	± 15 %	0.014	4.2	4.30
IHD-1	3.3	± 15 %	0.016	4.0	3.90
IHD-1	3.9	± 15 %	0.017	3.8	3.60
IHD-1	4.7	± 15 %	0.022	3.4	3.30
IHD-1	5.6	± 15 %	0.024	3.2	3.00
IHD-1	6.8	± 15 %	0.026	3.1	2.70
IHD-1	8.2	± 15 %	0.028	3.0	2.50
IHD-1	10	± 15 %	0.033	2.8	2.30
IHD-1	12	± 15 %	0.037	2.6	2.10
IHD-1	15	± 15 %	0.040	2.5	1.90
IHD-1	18	± 15 %	0.044	2.4	1.70
IHD-1	22	± 15 %	0.050	2.2	1.50
IHD-1	27	± 15 %	0.070	1.9	1.40
IHD-1	33	± 15 %	0.075	1.8	1.30
IHD-1	39	± 15 %	0.084	1.7	1.20
IHD-1	47	± 15 %	0.104	1.6	1.10
IHD-1	56	± 15 %	0.130	1.4	0.97
IHD-1	68	± 15 %	0.145	1.3	0.88
IHD-1	82	± 15 %	0.152	1.3	0.80
IHD-1	100	± 15 %	0.208	1.1	0.73
IHD-1	120	± 15 %	0.283	0.94	0.66
IHD-1	150	± 15 %	0.330	0.87	0.60
IHD-1	180	± 15 %	0.362	0.83	0.54
IHD-1	220	± 15 %	0.505	0.70	0.49
IHD-1	270	± 15 %	0.557	0.67	0.45
IHD-1	330	± 15 %	0.650	0.62	0.40
IHD-1	390	± 15 %	0.770	0.57	0.37
IHD-1	470	± 15 %	1.030	0.49	0.34
IHD-1	560	± 15 %	1.140	0.47	0.31

**IHD**

Vishay Dale

Filter Inductors, High Current, Axial  
Leaded

<b>STANDARD ELECTRICAL SPECIFICATIONS</b>					
<b>MODEL</b>	<b>IND. AT 1 kHz (<math>\mu</math>H)</b>	<b>TOL. (%)</b>	<b>DCR MAX. (<math>\Omega</math>)</b>	<b>RATED DC CURRENT MAX. (A)</b>	<b>INCREMENTAL CURRENT APPROX. (A)</b>
IHD-1	680	$\pm 15\%$	1.500	0.41	0.28
IHD-1	820	$\pm 15\%$	1.980	0.36	0.26
IHD-1	1000	$\pm 15\%$	2.300	0.33	0.23
IHD-1	1200	$\pm 15\%$	2.550	0.31	0.21
IHD-1	1500	$\pm 15\%$	3.000	0.29	0.19
IHD-1	1800	$\pm 15\%$	4.000	0.25	0.18
IHD-1	2200	$\pm 15\%$	4.400	0.24	0.16
IHD-1	2700	$\pm 15\%$	5.800	0.21	0.14
IHD-1	3300	$\pm 15\%$	6.560	0.20	0.13
IHD-1	3900	$\pm 15\%$	8.630	0.17	0.12
IHD-1	4700	$\pm 15\%$	10.100	0.16	0.11
IHD-1	5600	$\pm 15\%$	11.200	0.15	0.10
IHD-1	6800	$\pm 15\%$	15.000	0.13	0.09
IHD-1	8200	$\pm 15\%$	20.800	0.11	0.08
IHD-1	10 000	$\pm 15\%$	23.400	0.10	0.08
IHD-1	12 000	$\pm 15\%$	26.000	0.10	0.07
IHD-1	15 000	$\pm 15\%$	36.000	0.08	0.06
IHD-1	18 000	$\pm 15\%$	40.000	0.08	0.06
IHD-3	3.9	$\pm 15\%$	0.007	4.0	8.20
IHD-3	4.7	$\pm 15\%$	0.008	4.0	7.50
IHD-3	5.6	$\pm 15\%$	0.011	4.0	6.90
IHD-3	6.8	$\pm 15\%$	0.011	4.0	6.30
IHD-3	8.2	$\pm 15\%$	0.013	4.0	5.70
IHD-3	10	$\pm 15\%$	0.016	4.0	5.20
IHD-3	12	$\pm 15\%$	0.018	4.0	4.70
IHD-3	15	$\pm 15\%$	0.020	4.0	4.30
IHD-3	18	$\pm 15\%$	0.022	4.0	3.90
IHD-3	22	$\pm 15\%$	0.024	4.0	3.50
IHD-3	27	$\pm 15\%$	0.025	4.0	3.20
IHD-3	33	$\pm 15\%$	0.028	4.0	2.90
IHD-3	39	$\pm 15\%$	0.031	4.0	2.70
IHD-3	47	$\pm 15\%$	0.034	4.0	2.50
IHD-3	56	$\pm 15\%$	0.043	3.2	2.30
IHD-3	68	$\pm 15\%$	0.059	2.5	2.10
IHD-3	82	$\pm 15\%$	0.066	2.0	1.90
IHD-3	100	$\pm 15\%$	0.084	1.6	1.70
IHD-3	120	$\pm 15\%$	0.113	1.6	1.60
IHD-3	150	$\pm 15\%$	0.129	1.6	1.40
IHD-3	180	$\pm 15\%$	0.150	1.6	1.30
IHD-3	220	$\pm 15\%$	0.162	1.6	1.20
IHD-3	270	$\pm 15\%$	0.226	1.6	1.10
IHD-3	330	$\pm 15\%$	0.257	1.6	0.95
IHD-3	390	$\pm 15\%$	0.288	1.6	0.88
IHD-3	470	$\pm 15\%$	0.393	1.2	0.80
IHD-3	560	$\pm 15\%$	0.504	1.0	0.74
IHD-3	680	$\pm 15\%$	0.570	1.0	0.67
IHD-3	820	$\pm 15\%$	0.643	0.8	0.61
IHD-3	1000	$\pm 15\%$	0.844	0.8	0.56
IHD-3	1200	$\pm 15\%$	0.977	0.6	0.51
IHD-3	1500	$\pm 15\%$	1.180	0.6	0.46
IHD-3	1800	$\pm 15\%$	1.500	0.6	0.42
IHD-3	2200	$\pm 15\%$	1.760	0.5	0.38
IHD-3	2700	$\pm 15\%$	2.130	0.4	0.34
IHD-3	3300	$\pm 15\%$	2.530	0.4	0.31
IHD-3	3900	$\pm 15\%$	2.840	0.4	0.29
IHD-3	4700	$\pm 15\%$	3.790	0.4	0.26
IHD-3	5600	$\pm 15\%$	4.240	0.32	0.24
IHD-3	6800	$\pm 15\%$	5.750	0.25	0.22
IHD-3	8200	$\pm 15\%$	6.440	0.25	0.20
IHD-3	10 000	$\pm 15\%$	7.300	0.25	0.18
IHD-3	12 000	$\pm 15\%$	9.340	0.20	0.17
IHD-3	15 000	$\pm 15\%$	10.700	0.20	0.15
IHD-3	18 000	$\pm 15\%$	14.800	0.16	0.14
IHD-3	22 000	$\pm 15\%$	18.000	0.13	0.12
IHD-3	27 000	$\pm 15\%$	22.700	0.13	0.11
IHD-3	33 000	$\pm 15\%$	25.700	0.13	0.10
IHD-3	39 000	$\pm 15\%$	29.700	0.10	0.09
IHD-3	47 000	$\pm 15\%$	33.700	0.10	0.09
IHD-3	56 000	$\pm 15\%$	38.000	0.10	0.08
IHD-3	68 000	$\pm 15\%$	52.800	0.08	0.07
IHD-3	82 000	$\pm 15\%$	67.300	0.07	0.07
IHD-3	100 000	$\pm 15\%$	76.000	0.07	0.06

**IHD**

Filter Inductors, High Current, Axial  
Leaded

Vishay Dale

**MARKING**

- Vishay Dale
- Model
- Inductance value
- Date code

**ORDERING INFORMATION**

IHD-1	3.9 $\mu$ H	$\pm 15\%$	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

**GLOBAL PART NUMBER**

<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">I</div> <div style="border: 1px solid black; padding: 2px;">H</div> <div style="border: 1px solid black; padding: 2px;">D</div> <div style="border: 1px solid black; padding: 2px;">1</div> </div> <p>MODEL</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">E</div> <div style="border: 1px solid black; padding: 2px;">R</div> </div> <p>PACKAGE CODE</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">3</div> <div style="border: 1px solid black; padding: 2px;">R</div> <div style="border: 1px solid black; padding: 2px;">9</div> </div> <p>INDUCTANCE VALUE</p>	<div style="border: 1px solid black; padding: 2px;">L</div> <p>INDUCTANCE TOLERANCE</p>
---	--	--	---



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.



## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we strictly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.