



Surface-Mount, Common Mode Choke



FEATURES

- Low SMD profile design compatible with automated pick and place assembly
- High heat rating current to 31 A and saturation current to 35 A
- High temperature operation, up to 125 °C
- Dielectric withstand voltage between coils to 1500 V_{DC}
- Custom options for inductance, impedance, DCR and current rating are available
- Through-hole mounting configurations available
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



APPLICATIONS

- High current and high temperature applications
- DC/DC converters
- EMI Filters
- Motor noise suppression

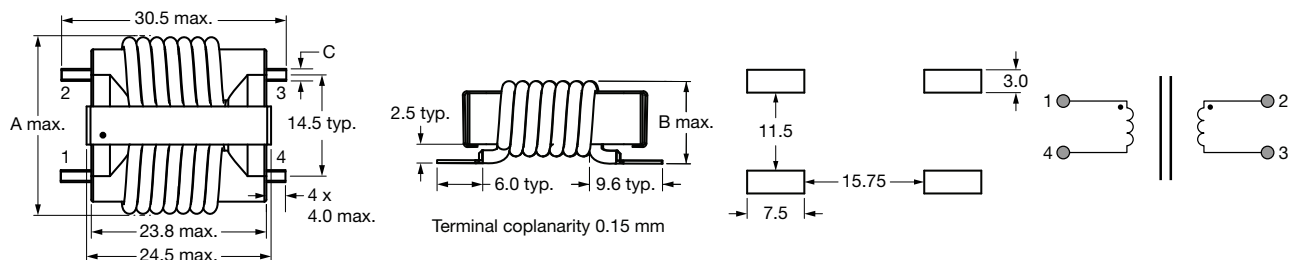
STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L ₀ INDUCTANCE ± 30 % AT 100 kHz, 0.25 V, 0 A (μH)	COMMON MODE IMPEDANCE AT 10 MHz, TYP. (Ω)	DC RESISTANCE MAX. (Ω)	HEAT RATING CURRENT TYPICAL (EST.) (A _{DC}) ⁽¹⁾	SATURATION CURRENT AT 25 °C TYP. (A _{DC}) ⁽²⁾	LEAKAGE MAX. (μH)
IHCM2321AAEG900N10	90	380	0.0015	31	35	2.5
IHCM2321AAEG121N10	120	480	0.0018	25	28	3.5
IHCM2321AAEG251N10	250	850	0.0050	14	19	7.5
IHCM2321AAEG301N10	300	900	0.0070	10	17	8.0
IHCM2321AAEG481N10	480	1200	0.0125	8	13	14.0

Notes

- All test data is referenced to 25°C ambient
 - Storage temperature range -55 °C to +125 °C
 - Operating temperature range -40 °C to +125 °C
 - 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
 - All data presented are preliminary and subject to change
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
 (2) DC current (A) that will cause L₀ to drop approximately 30 %

DIMENSIONS in millimeters



PART NUMBER	A MAX. (mm)	B MAX. (mm)	C ± 0.3 (mm)
IHCM2321AAEG900N10	25.5	12.5	2.4
IHCM2321AAEG121N10	25.0	11.5	2.2
IHCM2321AAEG251N10	24.5	11.0	1.8
IHCM2321AAEG301N10	24.0	10.5	1.6
IHCM2321AAEG481N10	23.5	10.0	1.5


DESCRIPTION

IHCM-2321AA-10	90 μH	± 30 %	EG	e3
MODEL	IMPEDANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I H C M	2 3 2 1 A A	E G	9 0 0	N	1 0
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EG = tray	900 = 90 μH	N = ± 30 %	

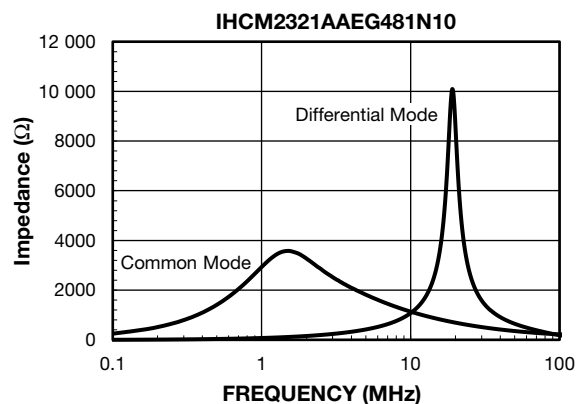
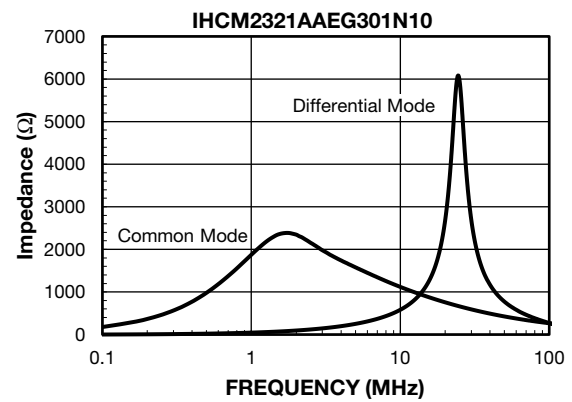
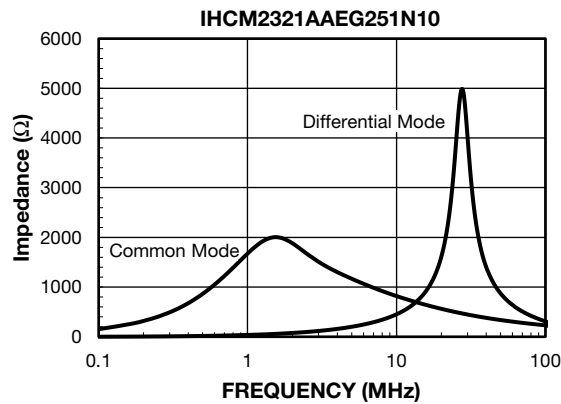
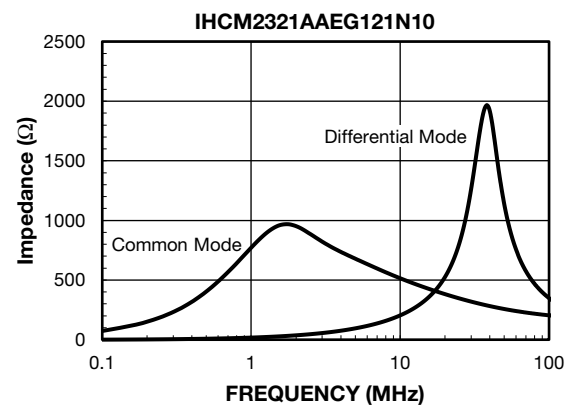
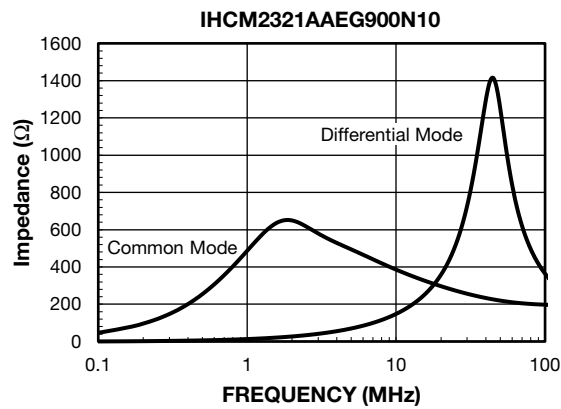
PACKAGE CODE OPTIONS

EG = tray packaging (160 pcs/box)

EN = tape and reel packaging (80 pcs/reel)

Note

- For additional packaging details see "[Packaging Methods](#)"

**PERFORMANCE GRAPHS: IMPEDANCE VS. FREQUENCY CHARACTERISTICS**



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.