



## 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<sub>DC</sub>
- 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](http://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 <sub>0</sub> 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 <sub>DC</sub> ) <sup>(1)</sup>	SATURATION CURRENT AT 25 °C TYP. (A <sub>DC</sub> ) <sup>(2)</sup>	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 L<sub>0</sub> 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 $\mu$ H	$\pm 30\%$	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 $\mu$ H	N = $\pm 30\%$	

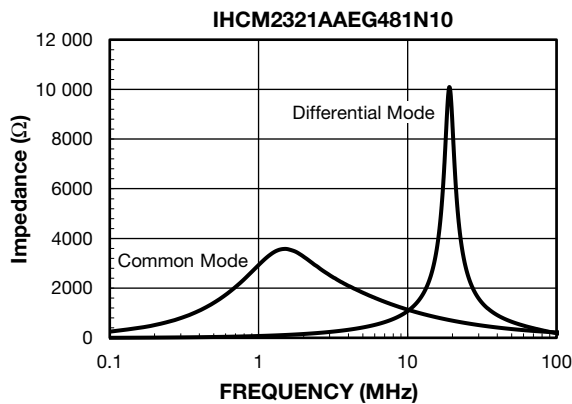
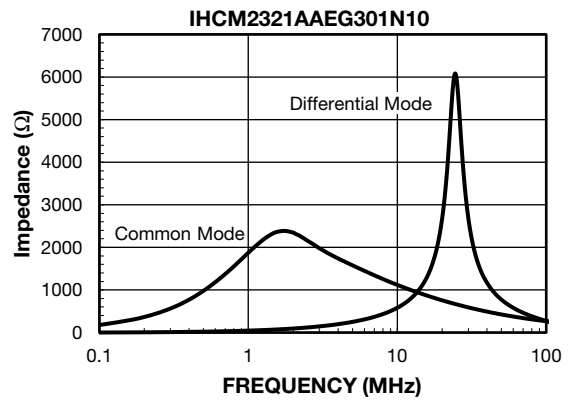
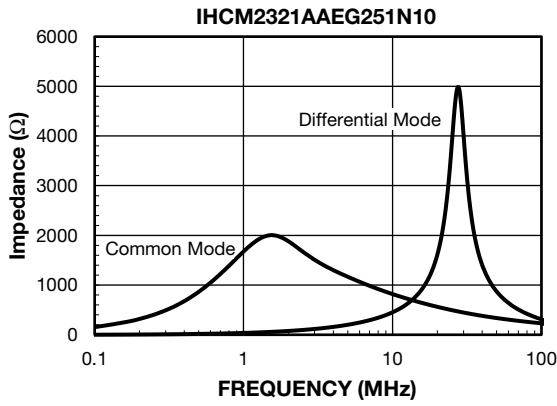
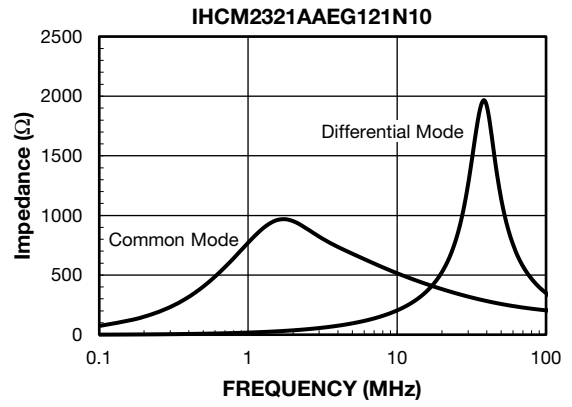
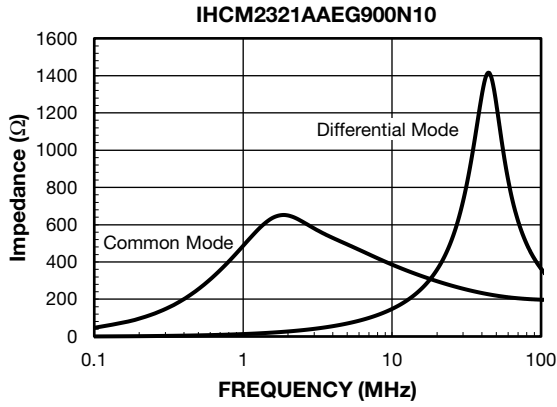
PACKAGE CODE OPTIONS
EG = tray packaging (160 pcs/box)
EN = tape and reel packaging (80 pcs/reel)

**Note**

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



PERFORMANCE GRAPHS: IMPEDANCE VS. FREQUENCY CHARACTERISTICS





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