Chokes and inductors

VHF chokes

Series/Type: **B82111B**
Date: November 2005

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Rated voltage 500 VAC/DC
Rated current 2 to 10 A
Rated inductance 3 to 25 µH



Construction

- Ferrite cylinder core
- Winding: single-layer, enamel copper wire, winding ends brought out as leads
- Polyester insulating sleeve

Features

- High resonant frequency
- High rated current
- RoHS-compatible[1)]

Applications

- RF blocking and filtering
- Interference suppression in small appliances

Marking

L_R and I_R in clear text and approval mark

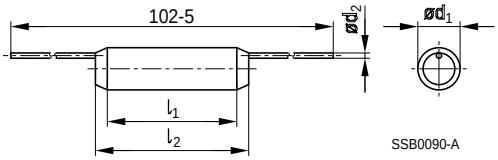
Delivery mode

Bulk

Approvals

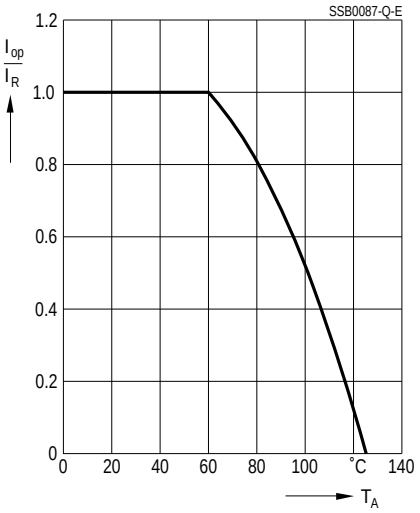
Approval mark	Standard
	EN 60938-2

Dimensional drawing



1) RoHS-compatible is defined as compatible with the following documents:
DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 February 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment COM (2004) 606 final Proposal for a COUNCIL DECISION amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment.

General technical data

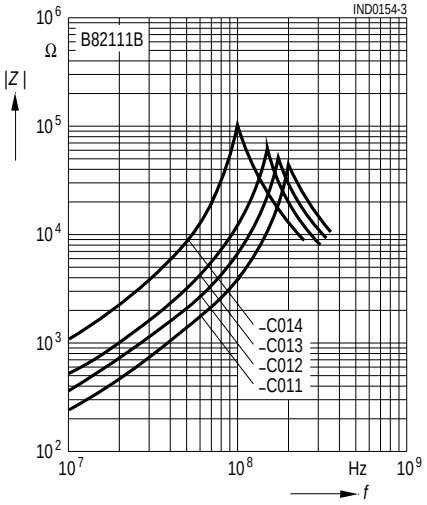
Test voltage V_{test}	2500 VAC, 1 min
Rated inductance L_R	Measuring frequency: L ≤ 10 µH = 1 MHz 10 µH < L ≤ 1000 µH = 100 kHz
Inductance tolerance	±20%
Rated current I_R	Referred to 60 °C ambient temperature, for derating see below
Inductance decrease $\Delta L/L_0$	≤10% (referred to initial value) at DC load I_R at 20 °C
DC resistance R_{typ}	Typical value, measured at 20 °C ambient temperature
Resonance frequency $f_{res, min}$	Typical value, measured with Scalar Network Analyzer ZAS from Rohde & Schwarz
Climatic category (IEC 60068-1)	55/125/56 (–55 °C/+125 °C/56 days damp heat test)
Current derating I_{op}/I_R versus ambient temperature T_A (rated temperature T_R = 60 °C)	
⚠ Mounting information	When bending the leads, take care that the bending point is **at least 3 mm** apart from the face ends of the core and that the start-of-winding-areas are not subjected to any mechanical stress.

Characteristics and ordering codes

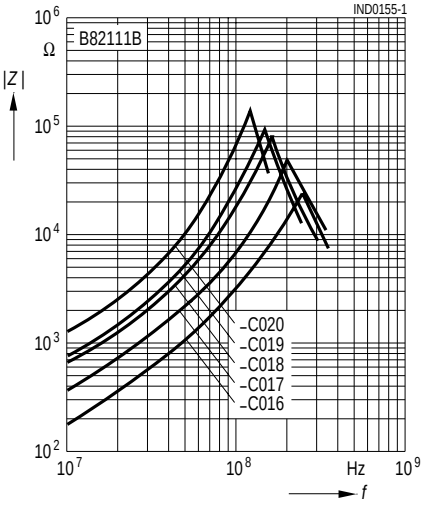
I_R	L_R	R_{typ}	f_{res}	Dimensions (mm)				Approx. weight	Ordering code
A	µH	Ω	MHz	$l_{1–1.5}$	$l_{2–3}$	$d_{1\ max.}$	d_2	g	
2	17	0.063	100	18.3	24	7.0	0.45	3.0	B82111B0000C014
3	8	0.025	145	18.3	24	7.0	0.63	3.0	B82111B0000C013
3	13	0.024	170	24.5	29	6.5	0.67	3.5	B82111B0000C019
3	20	0.054	125	24.5	29	6.0	0.5	3.5	B82111B0000C020
3	25	0.046	85	28.5	34	8.5	0.63	6.0	B82111B0000C024
4	6	0.017	170	18.3	24	7.5	0.75	3.0	B82111B0000C012
4	11	0.020	150	24.5	29	6.5	0.71	6.0	B82111B0000C018
4	15	0.024	120	28.5	34	8.5	0.75	7.0	B82111B0000C023
6	4	0.014	205	18.3	24	7.5	0.8	4.0	B82111B0000C011
6	6	0.010	200	24.5	29	7.0	0.95	5.0	B82111B0000C017
6	9	0.012	150	28.5	34	9.0	0.95	8.0	B82111B0000C022
9	3	0.006	220	24.5	29	7.5	1.2	5.0	B82111B0000C016
10	5	0.005	175	28.5	34	9.5	1.3	10.0	B82111B0000C021

Impedance |*Z*| versus frequency *f*
(typical values)

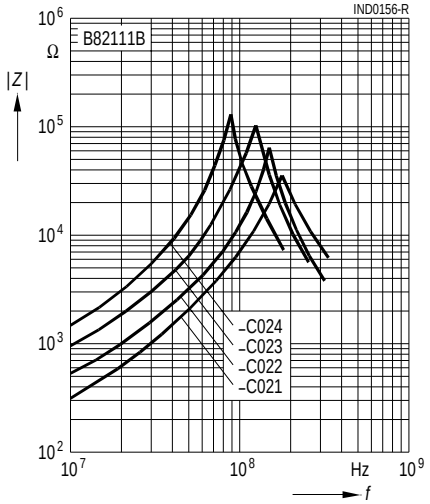
B82111B0000C011…C014



B82111B0000C016…C020



B82111B0000C021…C024



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