Chokes and inductors

VHF chokes

Series/Type: **B82111E**
Date: November 2005

Rated voltage 500 VAC/DC
Rated current 0.1 to 6 A
Rated inductance 7 to 1200 µH

Construction

- Ferrite cylinder core
- Winding: single-layer, enamel copper wire
- Polyester insulating sleeve

Features

- High resonant frequency
- Wide inductance range
- RoHS-compatible[1)]

Applications

- RF blocking and filtering
- Interference suppression in small appliances
- Decoupling in telecommunications and entertainment electronics

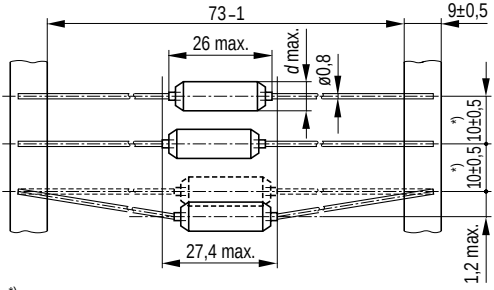
Marking

L_R and I_R in clear text

Delivery mode

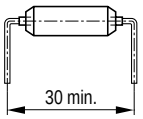
Taped and reeled
For details on packing and packing units see page 5.

Dimensional drawing



*) Tolerance over 10 spacings ± 2 mm

IND0150-S-E



IND0151-A

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

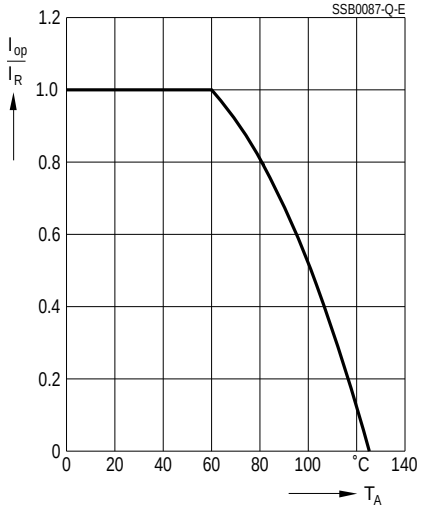
Test voltage V_{test}	2500 VAC, 1 min
Rated inductance L_R	Measuring frequency: L ≤ 10 µH = 1 MHz 10 µH < L ≤ 1000 µH = 100 kHz L > 1000 µH = 10 kHz
Inductance tolerance	±20%
Rated current I_R	Referred to 60 °C ambient temperature, for derating see below
Inductance decrease $\Delta L/L_0$	≤10% (referred 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)
⚠ 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}	Approx. weight	Dimensions d_{max}	Ordering code
A	µH	Ω	MHz	g	mm	
0.1	1200	34	16	2.2	6.0	B82111E0000C029
0.2	680	14	19	2.2	6.0	B82111E0000C028
0.3	470	6.5	25	2.3	6.0	B82111E0000C027
0.5	220	2.6	32	2.3	6.5	B82111E0000C026
1	100	0.65	55	2.5	6.5	B82111E0000C025
1.5	56	0.30	70	2.7	6.5	B82111E0000C024
2	40	0.18	90	3.0	7.0	B82111E0000C023
3	22	0.07	110	3.3	7.0	B82111E0000C022
4	12	0.04	140	3.5	7.5	B82111E0000C021
6	7	0.02	180	3.6	7.5	B82111E0000C020

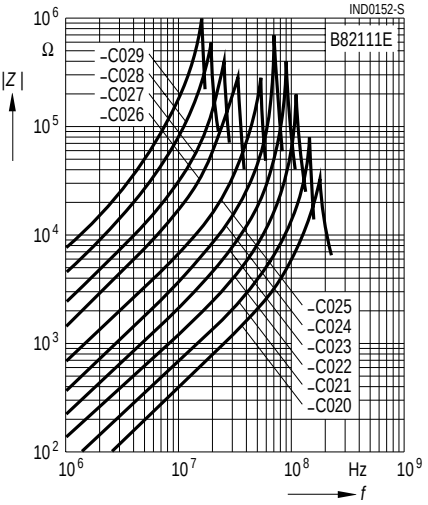
Current derating I_{op}/I_R versus ambient temperature T_A

(rated temperature T_R = 60 °C)



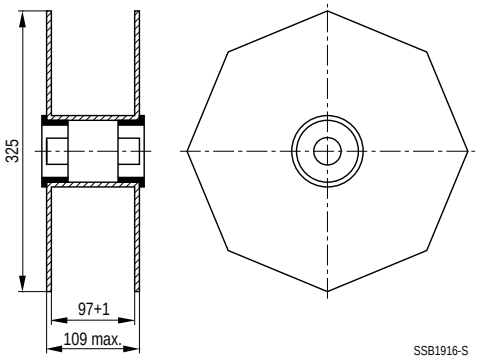
Impedance |Z|versus frequency f

(typical values)

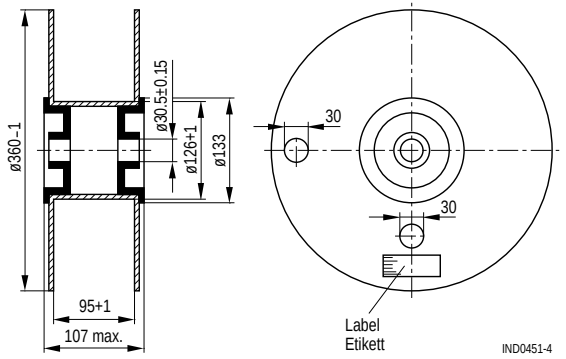


Packing

Reel packing for B82111E*C020, C029



Reel packing for B82111E*C21 ... C028



Packing units: 1000 pcs./reel

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