



## **Power line chokes**

Current-compensated ring core double chokes  
250 V AC, 16 A, 1.4 ... 2.2 mH

**Series/Type:**            **B82726S2163N0\*\***

**Date:**                    October 2008

**Rated voltage 250 V AC**

**Rated current 16 A**

**Rated inductance 1.4 mH to 2.2 mH**

### Construction

- Current-compensated ring core double choke
- Ferrite core
- Polycarbonate base plate (UL 94 V-0)
- Choke fixed on base plate with snap-in
- Sector winding
- Clearance  $\geq 5$  mm, creepage distance  $\geq 5$  mm

### Features

- Approx. 1% stray inductance  
for symmetrical interference suppression
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0565-2)
- RoHS-compatible

### Applications

- Suppression of common-mode interferences
- Switch-mode applications

### Terminals

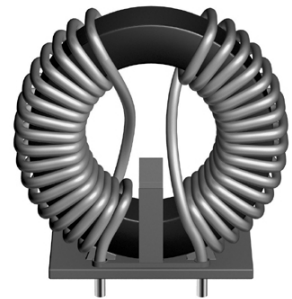
- Ends of winding wires
- Hot-dip tinned

### Marking

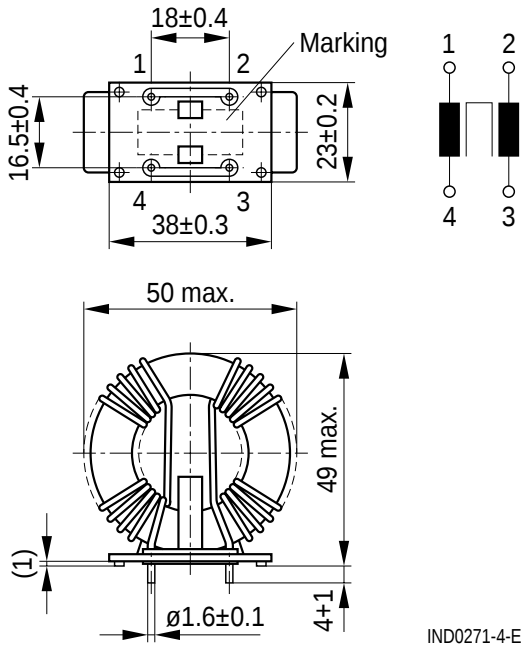
Manufacturer, ordering code, rated current,  
rated voltage, rated inductance,  
graphic symbol, date of manufacture (MM.YY)

### Delivery mode

Cardboard box



## Dimensional drawing and pin configuration



IND0271-4-E

Dimensions in mm

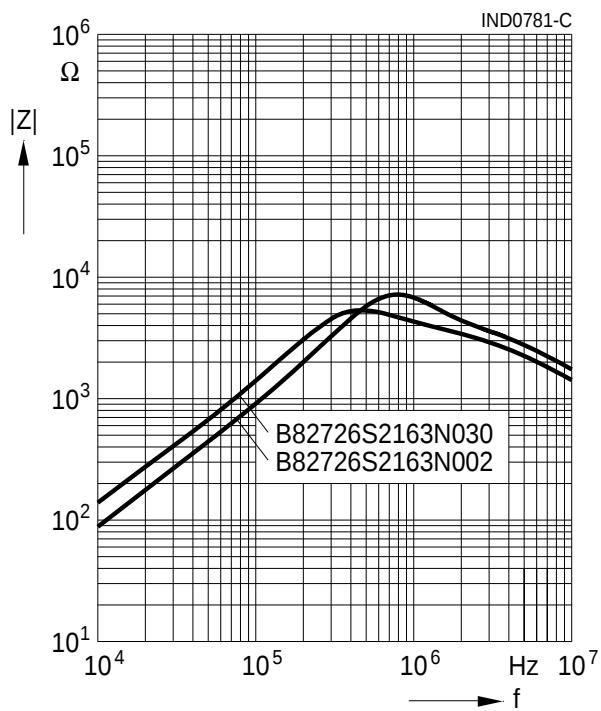
## Technical data and measuring conditions

|                                                  |                                                                                                              |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Rated voltage $V_R$                              | 250 V AC (50/60 Hz)                                                                                          |
| Test voltage $V_{test}$                          | 1500 V AC / 2400 V DC, 2 s (line/line)                                                                       |
| Rated temperature $T_R$                          | 60 °C                                                                                                        |
| Rated current $I_R$                              | Referred to 50 Hz and rated temperature                                                                      |
| Rated inductance $L_R$                           | Measured with Agilent 4284A at 10 kHz, 0.1 mA, 20 °C<br>Inductance is specified per winding.                 |
| Inductance tolerance                             | ±30% at 20 °C                                                                                                |
| Inductance decrease $\Delta L/L_0$               | < 10% at DC magnetic bias with $I_R$ , 20 °C                                                                 |
| Stray inductance $L_{stray,typ}$                 | Measured with Agilent 4284A at 10 kHz, 5 mA, 20 °C,<br>typical values                                        |
| DC resistance $R_{typ}$                          | Measured at 20 °C, typical values, specified per winding                                                     |
| Solderability (lead-free)                        | Sn96.5Ag3.0Cu0.5: (245 ±5) °C, (3 ±0.3) s<br>Wetting of soldering area ≥ 95%<br>(to IEC 60068-2-20, test Ta) |
| Resistance to soldering heat<br>(wave soldering) | (260 ±5) °C, (10 ±1) s<br>(to IEC 60068-2-20, test Tb)                                                       |
| Climatic category                                | 40/125/56 (to IEC 60068-1)                                                                                   |
| Storage conditions (packaged)                    | −25 °C ... +40 °C, ≤ 75% RH                                                                                  |
| Weight                                           | Approx. 90 g                                                                                                 |

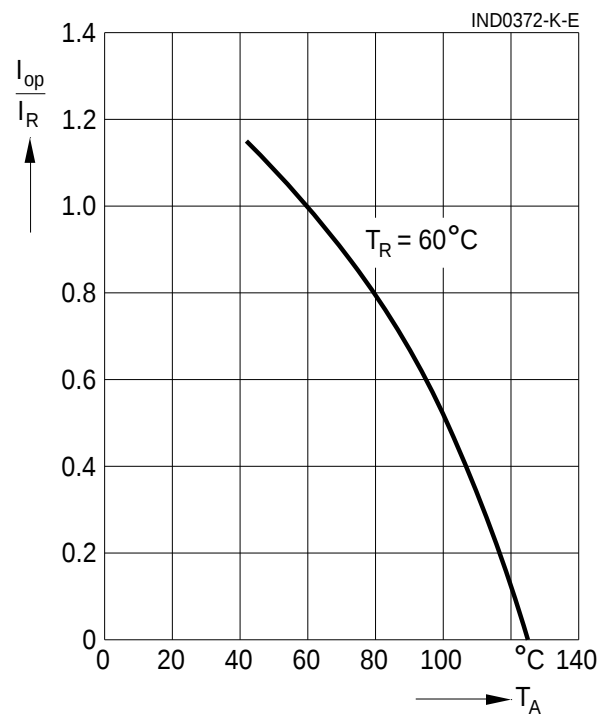
# Characteristics and ordering code

| $I_R$<br>A | $L_R$<br>mH | $L_{\text{stray, typ}}$<br>$\mu\text{H}$ | $R_{\text{typ}}$<br>$\text{m}\Omega$ | Ordering code   |
|------------|-------------|------------------------------------------|--------------------------------------|-----------------|
| 16         | 1.4         | 21                                       | 7.1                                  | B82726S2163N002 |
| 16         | 2.2         | 24                                       | 7.1                                  | B82726S2163N030 |

**Impedance  $|Z|$  versus frequency  $f$**   
measured with windings in parallel at 20 °C,  
typical values



**Current derating  $I_{\text{op}}/I_R$**   
**versus ambient temperature  $T_A$**



## Cautions and warnings

- Please note the recommendations in our Inductors data book (latest edition) and in the data sheets.
  - Particular attention should be paid to the derating curves given there.
  - The soldering conditions should also be observed. Temperatures quoted in relation to wave soldering refer to the pin, not the housing.
- If the components are to be washed varnished it is necessary to check whether the washing varnish agent that is used has a negative effect on the wire insulation, any plastics that are used, or on glued joints. In particular, it is possible for washing varnish agent residues to have a negative effect in the long-term on wire insulation.
- The following points must be observed if the components are potted in customer applications:
  - Many potting materials shrink as they harden. They therefore exert a pressure on the plastic housing or core. This pressure can have a deleterious effect on electrical properties, and in extreme cases can damage the core or plastic housing mechanically.
  - It is necessary to check whether the potting material used attacks or destroys the wire insulation, plastics or glue.
  - The effect of the potting material can change the high-frequency behaviour of the components.
- Ferrites are sensitive to direct impact. This can cause the core material to flake, or lead to breakage of the core.
- Even for customer-specific products, conclusive validation of the component in the circuit can only be carried out by the customer.

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