

# **Power line chokes**

Ring core choke with iron powder core

Series/Type: R 18

Ordering code: B82622S0173L030

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# Ring core choke with iron powder core

R 18

Rated current:  $30 \text{ A} / +85 ^{\circ}\text{C}$ Rated inductance:  $2.1 \mu\text{H}$ 

#### Construction

- Ring core choke with iron powder core
- Sector winding
- Baseplate
- Core, pins and baseplate glued

#### **Features**

- Baseplate flame retardant as per UL 94 V-0
- Enameled wire in accordance to EN 60317-13
- RoHS-compatible

## **Applications**

■ EMC choke

#### **Terminals**

- Ends of winding wire
- Pins hot dip tinned with Sn99Cu

# Marking

Manufacturer, ordering code and date code (YYWWD/X)

#### Delivery mode and packing units

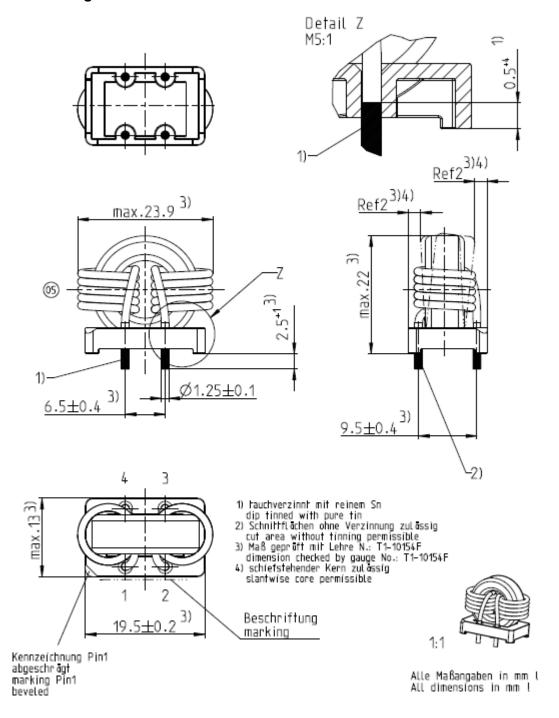
- Blister tray
- 72 pcs per tray



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## **Dimensional drawing**





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# Technical data and measuring conditions

Rated inductance L <sub>R</sub>	2.1 µH Measured at 100 kHz, 0.1 mA, +20 °C (both windings parallel connected)
Rated temperature T <sub>R</sub>	+85 °C
Rated current I <sub>R</sub>	$30 \text{ A}$ Referred to rated temperature $T_R$
Inductance tolerance	±15% at +20 °C
Inductance L @ 70 A	0.5 μH (both windings parallel connected)
DC resistance R <sub>typ</sub>	2.45 m© Measured at +20 °C, typical value, specified per winding, end of baseplate.
DC resistance R <sub>max</sub>	2.80 m© Measured at +20 °C, max. value, specified per winding, end of baseplate.
Test voltage V <sub>test</sub>	500 V AC, 2 s (line/line)
Operating temperature range	−40 °C +150 °C
Weight	Approx. 13 g



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### **Cautions and warnings**

- Additional information is contained in our data books, which are also available on the
  internet. Particular attention should be paid to the derating curves given there. The
  soldering conditions given there should also be observed. Temperatures quoted in
  relation to wave soldering refer to the pin, not to the housing.
- If the components are to be washed varnished, it is necessary to check whether any 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. Washing processes may damage the product due to the possible static or cyclic mechanical loads (e.g. ultrasonic cleaning). They may cause cracks to develop on the product and its parts, which might lead to reduced reliability or lifetime.
- The following points must be observed if the components are potted in customer applications:
  - Many potted 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 components in the circuit can only be carried out by the customer.

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