



**Size 6x6 mm**

**Rated inductance 0,82  $\mu$ H .. 1000  $\mu$ H**

### Construction

- Ferrite core
- Magnetically shielded
- Winding: enamel copper wire
- Winding welded to terminals

### Features

- Wide temperature range
- High rated current
- Low DC resistance
- Suitable for reflow soldering

### Applications

- Filtering of supply voltages
- Coupling, decoupling
- DC/DC converters
- Automotive electronics

### Terminals

- Leadfree tinned

### Marking

Marking on component:

Manufacturer

L value (in  $\mu$ H) and tolerance (coded)

Date code

Minimum marking on reel:

Manufacturer, part number, ordering code,

L value and tolerance

quantity, date of packing

### Delivery mode

Blister tape 12mm, reel packing

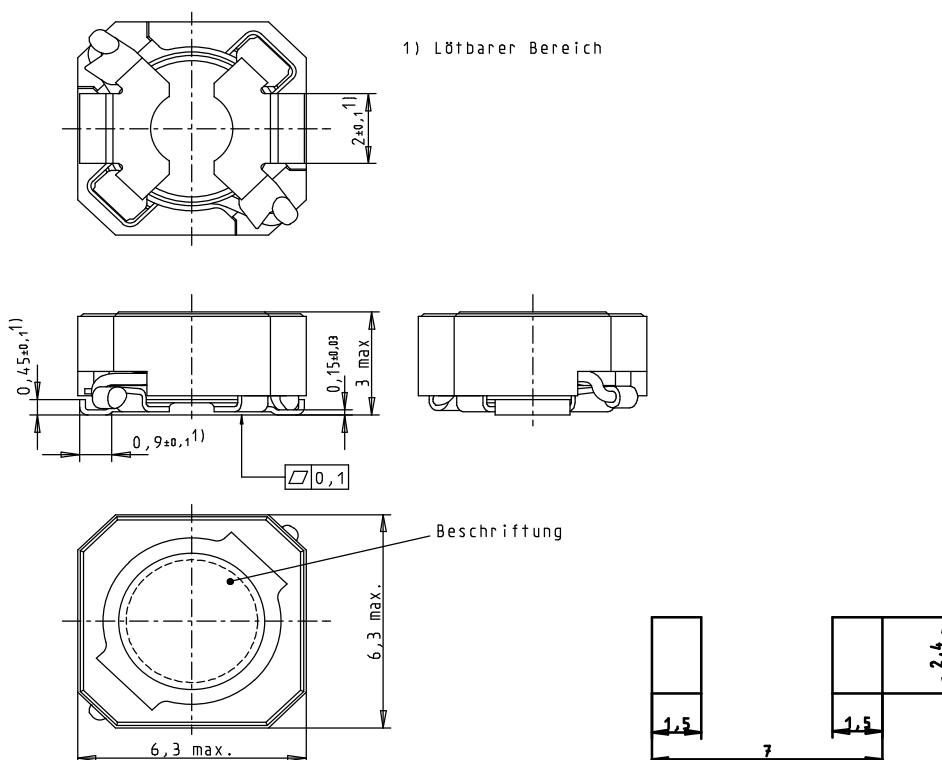
packaging quantity 2500 pcs per reel



## General technical data

|                                    |                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------|
| Rated inductance $L_R$             | Measured with HP 4294A, measuring voltage 100 mV                                                |
| Rated current $I_R$                | Maximum permissible DC with temperature increase of $\leq 40$ K at ambient temperature of 85 °C |
| Saturation current                 | Maximum permissible DC with inductance decrease $\Delta L/L_0 \approx 10\%$                     |
| Climatic category                  | In accordance with IEC 60068-1 55/125/56 (-55 °C/ +125 °C/ 56 days damp heat test)              |
| Solderability                      | 5s, 235°C, wetting > 90%                                                                        |
| Resistance to soldering heat       | acc. to IEC 60068-2-58, leadfree reflow soldering profile                                       |
| Self-resonance frequency $f_{res}$ | Measured with network analyzer HP 8753                                                          |
| DC resistance $R_{max}$            | Measured at 20 °C ambient temperature                                                           |
| Weight                             | Approx. 1,5g                                                                                    |

## Dimensional drawing

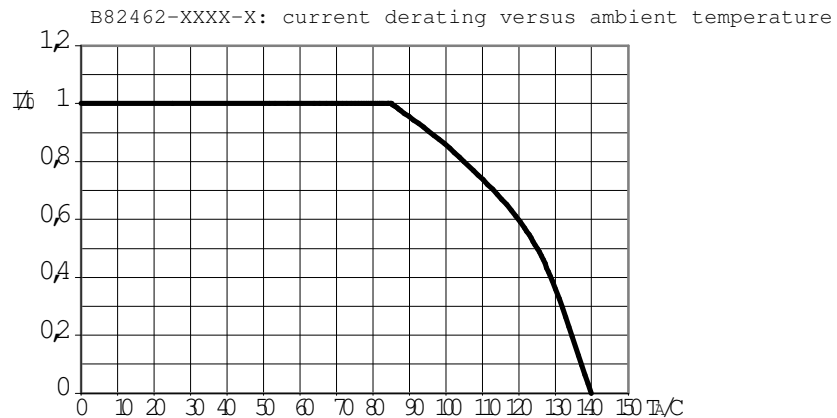



**Characteristics and ordering codes**

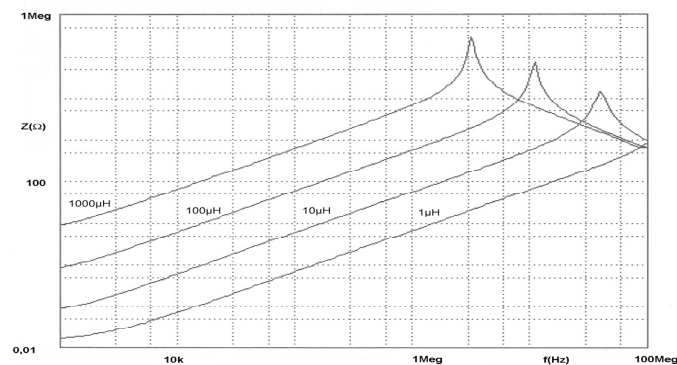
| $L_R$<br>$\mu H$ | $f_L$<br>MHz | Tolerance | $I_{sat}$<br>A | $I_R$<br>A | $R_{max}$<br>$\Omega$ | $f_{res,typ}$<br>MHz | Ordering code  |
|------------------|--------------|-----------|----------------|------------|-----------------------|----------------------|----------------|
| 0,82             | 0,1          | 20 %      | 4,45           | 3,45       | 0,015                 | 182                  | B82462-G4821-M |
| 1,0              | 0,1          | 20 %      | 4,40           | 3,40       | 0,016                 | 180                  | B82462-G4102-M |
| 1,2              | 0,1          | 20 %      | 3,90           | 3,25       | 0,017                 | 130                  | B82462-G4122-M |
| 1,5              | 0,1          | 20 %      | 3,60           | 3,10       | 0,020                 | 100                  | B82462-G4152-M |
| 2,2              | 0,1          | 20 %      | 2,60           | 2,55       | 0,025                 | 75                   | B82462-G4222-M |
| 3,3              | 0,1          | 20 %      | 2,10           | 2,30       | 0,031                 | 60                   | B82462-G4332-M |
| 4,7              | 0,1          | 20 %      | 1,80           | 2,00       | 0,040                 | 55                   | B82462-G4472-M |
| 6,8              | 0,1          | 20 %      | 1,50           | 1,65       | 0,050                 | 40                   | B82462-G4682-M |
| 10               | 0,1          | 20 %      | 1,30           | 1,50       | 0,062                 | 31                   | B82462-G4103-M |
| 15               | 0,1          | 20 %      | 1,05           | 1,25       | 0,097                 | 23                   | B82462-G4153-M |
| 22               | 0,1          | 20 %      | 0,85           | 1,05       | 0,15                  | 20                   | B82462-G4223-M |
| 33               | 0,1          | 20 %      | 0,72           | 0,85       | 0,23                  | 16                   | B82462-G4333-M |
| 47               | 0,1          | 20 %      | 0,60           | 0,75       | 0,31                  | 13                   | B82462-G4473-M |
| 68               | 0,1          | 20 %      | 0,50           | 0,65       | 0,41                  | 10                   | B82462-G4683-M |
| 100              | 0,1          | 20%       | 0,42           | 0,53       | 0,58                  | 8,5                  | B82462-G4104-M |
| 150              | 0,1          | 20 %      | 0,33           | 0,38       | 1,05                  | 6,5                  | B82462-G4154-M |
| 220              | 0,1          | 20 %      | 0,28           | 0,35       | 1,35                  | 5,5                  | B82462-G4224-M |
| 330              | 0,1          | 20 %      | 0,22           | 0,27       | 2,30                  | 4,5                  | B82462-G4334-M |
| 470              | 0,1          | 20 %      | 0,18           | 0,24       | 2,70                  | 3,5                  | B82462-G4474-M |
| 680              | 0,1          | 20 %      | 0,15           | 0,20       | 4,05                  | 3,0                  | B82462-G4684-M |
| 1000             | 0,1          | 20 %      | 0,13           | 0,16       | 6,00                  | 2,5                  | B82462-G4105-M |



## Typical diagrams:



## Impedance versus frequency



## Inductance derating versus load current

