



**Size 10x10 mm**  
**Rated inductance 1  $\mu$ H .. 1000  $\mu$ H**

### Construction

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

### Features

- Wide temperature range
- Very high rated current
- Low DC resistance
- Suitable for leadfree 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 of manufacture (coded)

Minimum marking on reel:

Manufacturer, part number, ordering code,

L value and tolerance

quantity, date of packing

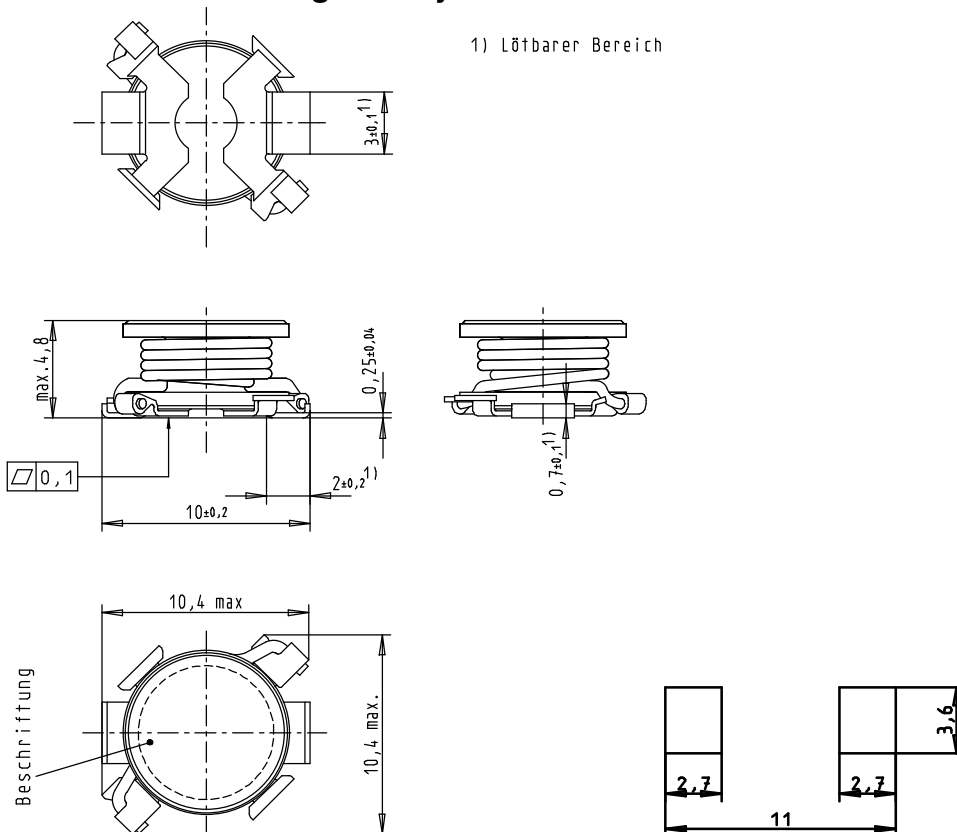
### Delivery mode

Blister tape 16mm, reel packing

packaging quantity 750 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 $I_{sat}$       | Maximum permissible DC with inductance decrease-<br>$\Delta L/L_0 \approx 10\%$                 |
| Self-resonance frequency $f_{res}$ | Typical self-resonance frequency<br>measured with network analyzer HP 8753                      |
| Climatic category                  | In accordance with IEC 60068-1 55/125/56<br>(-55 °C/ +125 °C/ 56 days damp heat test)           |
| Solderability                      | 5s, 235°C, wetting > 90%                                                                        |
| Mounting on PCB                    | Suitable for leadfree soldering profiles<br>e.g. like shown in JEDEC J-STD-020C                 |
| DC resistance $R_{max}$            | Measured at 20 °C ambient temperature                                                           |
| Weight                             | Approx. 1,5g                                                                                    |

**Dimensional drawing and layout recommendation**



**Characteristics and ordering codes**

| $L_R$<br>$\mu\text{H}$ | $f_L$<br>MHz | Tolerance | $I_{\text{Sat}}$<br>A | $I_R$<br>A | $R_{\text{max}}$<br>$\Omega$ | $f_{\text{res}}$<br>MHz | Ordering code  |
|------------------------|--------------|-----------|-----------------------|------------|------------------------------|-------------------------|----------------|
| 1,0                    | 0,1          | 20 %      | 11                    | 7,00       | 0,009                        | 120                     | B82464–A4102–M |
| 1,5                    | 0,1          | 20 %      | 9,8                   | 6,50       | 0,010                        | 80                      | B82464–A4152–M |
| 2,2                    | 0,1          | 20 %      | 8,4                   | 5,70       | 0,012                        | 60                      | B82464–A4222–M |
| 3,6                    | 0,1          | 20 %      | 6,6                   | 4,90       | 0,015                        | 50                      | B82464–A4362–M |
| 4,7                    | 0,1          | 20 %      | 5,6                   | 4,30       | 0,018                        | 42                      | B82464–A4472–M |
| 6,8                    | 0,1          | 20 %      | 4,7                   | 3,50       | 0,027                        | 30                      | B82464–A4682–M |
| 10                     | 0,1          | 20 %      | 3,9                   | 2,90       | 0,038                        | 24                      | B82464–A4103–M |
| 15                     | 0,1          | 10 %      | 3,2                   | 2,50       | 0,046                        | 18                      | B82464–A4153–K |
| 22                     | 0,1          | 10 %      | 2,6                   | 2,10       | 0,085                        | 15                      | B82464–A4223–K |
| 33                     | 0,1          | 10 %      | 2,2                   | 1,80       | 0,10                         | 13                      | B82464–A4333–K |
| 47                     | 0,1          | 10 %      | 1,8                   | 1,50       | 0,14                         | 11                      | B82464–A4473–K |
| 68                     | 0,1          | 10 %      | 1,5                   | 1,25       | 0,20                         | 9,0                     | B82464–A4683–K |
| 100                    | 0,1          | 10 %      | 1,2                   | 1,03       | 0,28                         | 8,0                     | B82464–A4104–K |
| 150                    | 0,1          | 10 %      | 1,0                   | 0,86       | 0,40                         | 6,0                     | B82464–A4154–K |
| 220                    | 0,1          | 10 %      | 0,85                  | 0,69       | 0,61                         | 5,0                     | B82464–A4224–K |
| 330                    | 0,1          | 10 %      | 0,70                  | 0,58       | 1,00                         | 4,0                     | B82464–A4334–K |
| 470                    | 0,1          | 10 %      | 0,55                  | 0,50       | 1,27                         | 3,2                     | B82464–A4474–K |
| 680                    | 0,1          | 10 %      | 0,45                  | 0,40       | 2,00                         | 2,5                     | B82464–A4684–K |
| 1000                   | 0,1          | 10 %      | 0,38                  | 0,33       | 3,00                         | 2,0                     | B82464–A4105–K |

