



SMT-Power-Inductors

B82471

DATA SHEET

**SMD**

**Rated inductance** 10  $\mu\text{H}$  .. 220  $\mu\text{H}$

### Construction

- Ferrite core
- Winding: enamel copper wire
- Winding soldered to terminals
- Plastic terminal carrier

### Features

- High rated current
- Low DC resistance
- Suitable for reflow soldering (IR and vapor phase)

### Applications

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

### Terminals

- Tinned

### Marking

Marking on component:

Manufacturer, L value (in  $\mu\text{H}$ )

Minimum marking on reel:

Manufacturer, part number, ordering code,  
L value and tolerance  
quantity, date of packing

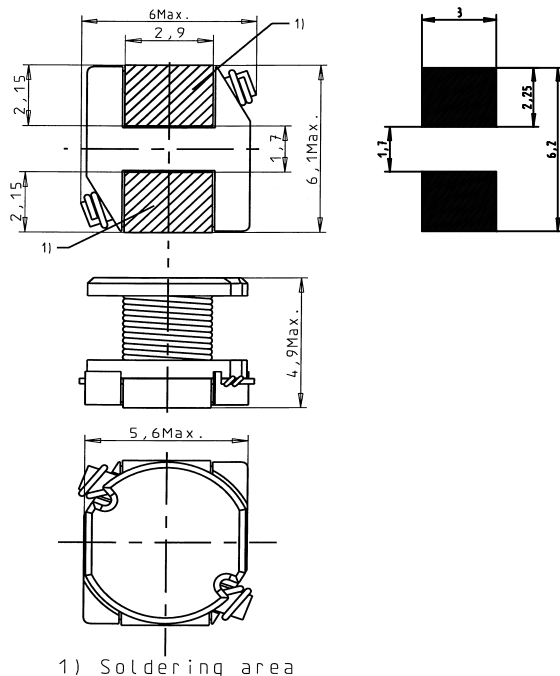
### Delivery mode

16-mm blister tape , reel packing  
packaging quantity 2000pcs/reel



**SMT-Power-Inductors****B82471****DATA SHEET****General technical data**

|                              |                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------|
| Rated inductance $L_R$       | Measured with HP 4284A ,<br>measuring voltage 100 mV                                               |
| Rated current $I_R$          | Maximum permissible DC with temperature increase<br>of $\leq 40$ K at ambient temperature of 85 °C |
| Saturation current $I_{sat}$ | Maximum permissible DC with inductance decrease<br>$\Delta L/L_0 \approx 10\%$                     |
| 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%                                                                           |
| DC resistance $R_{max}$      | Measured at 20 °C ambient temperature                                                              |
| Weight                       | Approx. 1 g                                                                                        |

**Dimensional drawing and layout recommendation**

**SMT-Power-Inductors****B82471****DATA SHEET****Characteristics and ordering codes**

| $L_R$<br>$\mu H$ | $f_L$<br>MHz | Tolerance | $I_R$<br>A | $I_{Sat}$<br>A | $R_{max}$<br>$\Omega$ | Ordering code  |
|------------------|--------------|-----------|------------|----------------|-----------------------|----------------|
| 10               | 0,1          | 20 %      | 1,44       | 1,80           | 0,10                  | B82471-A1103-M |
| 15               | 0,1          | 20 %      | 1,30       | 1,45           | 0,14                  | B82471-A1153-M |
| 22               | 0,1          | 20 %      | 1,11       | 1,20           | 0,18                  | B82471-A1223-M |
| 33               | 0,1          | 20 %      | 0,88       | 1,00           | 0,23                  | B82471-A1333-M |
| 47               | 0,1          | 20 %      | 0,72       | 0,85           | 0,37                  | B82471-A1473-M |
| 68               | 0,1          | 10 %      | 0,61       | 0,70           | 0,46                  | B82471-A1683-K |
| 100              | 0,1          | 10 %      | 0,52       | 0,60           | 0,70                  | B82471-A1104-K |
| 150              | 0,1          | 10 %      | 0,40       | 0,48           | 1,10                  | B82471-A1154-K |
| 220              | 0,1          | 10 %      | 0,35       | 0,38           | 1,57                  | B82471-A1224-K |