



## Chokes for Power Lines

B82721

## Current-Compensated Ring Core Double Chokes

... B82725

### Construction

- Current-compensated ring core double choke with ferrite core
- Polycarbonate case
- Polyurethane potting
- Sector winding



### Features

- Case and potting flame-retardant as per UL 94 V-0
- High resonance frequency owing to special winding technique
- Approx. 1 % stray inductance for symmetrical interference suppression



### Applications

| Application                           | Type                 |
|---------------------------------------|----------------------|
| Electronic ballasts in lamps          | B82721<br>B82722     |
| Switch-mode power supplies in TV sets | B82721 ...<br>B82725 |
| Washing machines                      | B82724<br>B82725     |
| Power supplies                        | B82724<br>B82725     |
| Chargers                              | B82725               |

### Terminals

- Pins 0,7 × 0,7 mm or 1 × 1 mm (B82725)
- Pins fitting standard PCB grid

### Marking

Ordering code, rated current, rated inductance, rated voltage (except B82721-K), graphic symbol, mark of conformity, manufacturer, date of manufacture

### Approvals<sup>1)</sup>

| Marks of conformity | Standards            |
|---------------------|----------------------|
|                     | VDE 0565-2           |
|                     | EN 60938-2 (pending) |
|                     | UL 1283              |

1) Approvals to EN 60938-2 and UL 1283 pending for B82725-J.



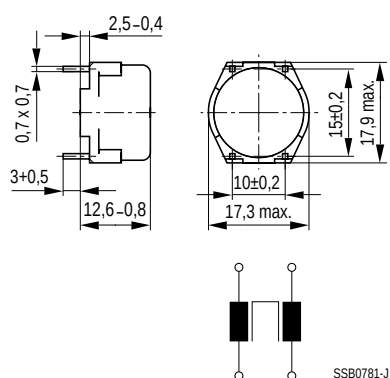
## Chokes for Power Lines

B82721

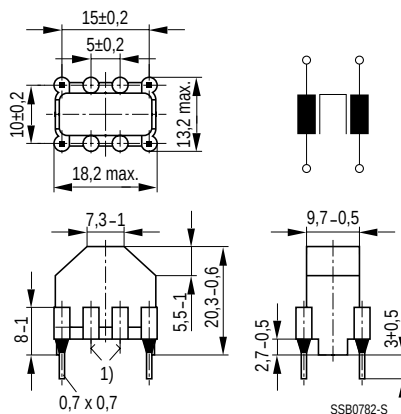
### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration

Horizontal version (B82721-A)



Vertical version (B82721-K)



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 5 g                                     |

For further technical data [see page 334](#). For impedance =  $f(f)$  [see page 355](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_S$ typ<br>$\mu$ H | $R_{typ}$<br>m $\Omega$ | Ordering code<br>horizontal version | vertical version |
|------------|-------------|----------------------|-------------------------|-------------------------------------|------------------|
| 0,4        | 39          | 450                  | 2000                    | B82721-A2401-N20                    | B82721-K2401-N20 |
| 0,4        | 27          | 270                  | 1700                    | B82721-A2401-N21                    | B82721-K2401-N21 |
| 0,5        | 18          | 260                  | 1500                    | B82721-A2501-N1                     | B82721-K2501-N1  |
| 0,7        | 10          | 90                   | 600                     | B82721-A2701-N20                    | B82721-K2701-N20 |
| 1,2        | 6,8         | 70                   | 280                     | B82721-A2122-N20                    | B82721-K2122-N20 |
| 1,5        | 3,3         | 37                   | 190                     | B82721-A2152-N1                     | B82721-K2152-N1  |
| 2,0        | 1,0         | 13                   | 90                      | B82721-A2202-N1                     | B82721-K2202-N1  |
| 2,6        | 0,4         | 6                    | 60                      | B82721-A2262-N1                     | B82721-K2262-N1  |
| 3,6        | 0,4         | 6                    | 35                      | B82721-A2362-N1                     | B82721-K2362-N1  |

1) Vertical version with lead spacing 5 mm × 10 mm upon request.



## Chokes for Power Lines

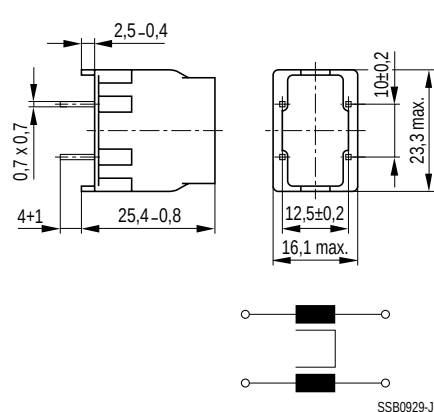
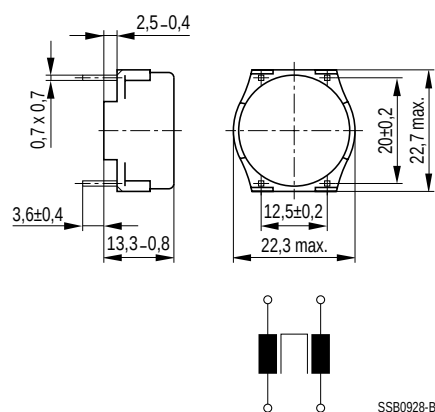
B82722

### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration

Horizontal version (B82722-A)

Vertical version (B82722-J)



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 10 g                                    |

For further technical data [see page 334](#). For impedance = f (f) [see page 355](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_S$ , typ<br>μH | $R_{typ}$<br>mΩ | Ordering code<br>horizontal version | vertical version |
|------------|-------------|-------------------|-----------------|-------------------------------------|------------------|
| 0,3        | 47          | 760               | 2500            | B82722-A2301-N1                     | B82722-J2301-N1  |
| 0,5        | 27          | 430               | 1200            | B82722-A2501-N1                     | B82722-J2501-N1  |
| 1          | 10          | 140               | 480             | B82722-A2102-N1                     | B82722-J2102-N1  |
| 2          | 2,2         | 30                | 130             | B82722-A2202-N1                     | B82722-J2202-N1  |
| 3          | 1,2         | 17                | 56              | B82722-A2302-N1                     | B82722-J2302-N1  |



## Chokes for Power Lines

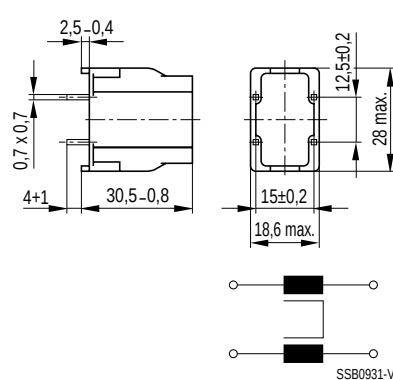
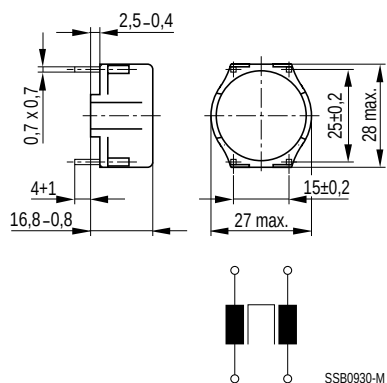
B82723

### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration

Horizontal version (B82723-A)

Vertical version (B82723-J)



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 20 g                                    |

For further technical data [see page 334](#). For impedance =  $f(f)$  [see page 355](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_{S, typ}$<br>μH | $R_{typ}$<br>mΩ | Ordering code<br>horizontal version | vertical version |
|------------|-------------|--------------------|-----------------|-------------------------------------|------------------|
| 0,5        | 56          | 870                | 2200            | B82723-A2501-N1                     | B82723-J2501-N1  |
| 1          | 27          | 440                | 750             | B82723-A2102-N1                     | B82723-J2102-N1  |
| 2          | 5,6         | 80                 | 160             | B82723-A2202-N1                     | B82723-J2202-N1  |
| 4          | 2,7         | 30                 | 60              | B82723-A2402-N1                     | B82723-J2402-N1  |



## Chokes for Power Lines

B82724-A

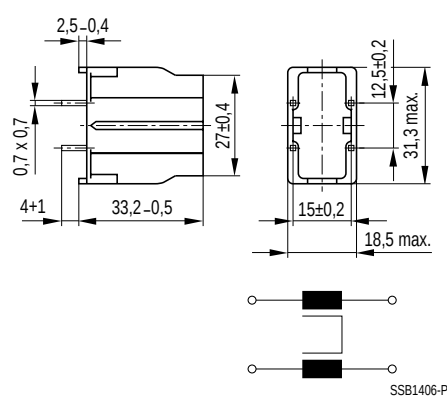
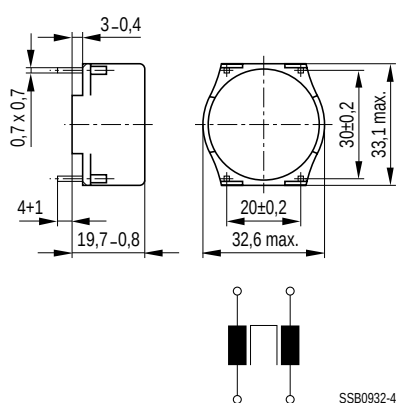
## Current-Compensated Ring Core Double Chokes

B82724-J

### Dimensional drawings and pin configuration

Horizontal version (B82724-A)

Vertical version (B82724-J)



### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 25 g                                    |

For further technical data [see page 334](#). For impedance = f (f) [see page 356](#)

### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_S$ , typ<br>μH | $R_{typ}$<br>mΩ | Ordering code<br>horizontal version | vertical version |
|------------|-------------|-------------------|-----------------|-------------------------------------|------------------|
| 0,5        | 82          | 1000              | 2700            | B82724-A2501-N1                     | B82724-J2501-N1  |
| 1          | 33          | 420               | 810             | B82724-A2102-N1                     | B82724-J2102-N1  |
| 1,4        | 27          | 310               | 500             | B82724-A2142-N1                     | B82724-J2142-N1  |
| 2          | 6,8         | 80                | 190             | B82724-A2202-N1                     | B82724-J2202-N1  |
| 4          | 3,3         | 40                | 66              | B82724-A2402-N1                     | B82724-J2402-N1  |

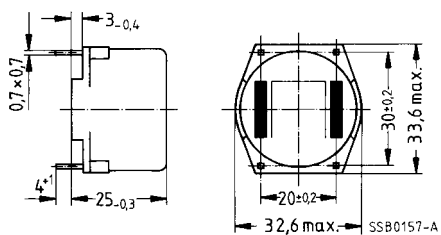


## Chokes for Power Lines

B82724-B

### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | $\pm 30 \%$                                     |
| Weight               | Approx. 40 g                                    |

For further technical data [see page 334](#). For impedance =  $f(f)$  [see page 356](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_{S, typ}$<br>$\mu H$ | $R_{typ}$<br>m $\Omega$ | Ordering code   |
|------------|-------------|-------------------------|-------------------------|-----------------|
| 1          | 47          | 550                     | 880                     | B82724-B2102-N1 |
| 2          | 10          | 110                     | 230                     | B82724-B2202-N1 |
| 4          | 3,9         | 40                      | 58                      | B82724-B2402-N1 |
| 6          | 1,8         | 16                      | 23                      | B82724-B2602-N1 |

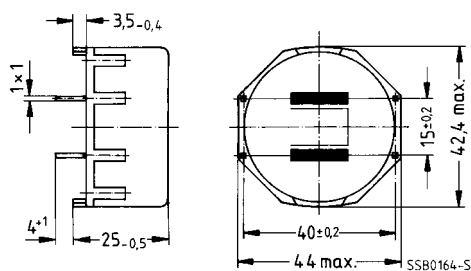


## Chokes for Power Lines

B82725-A

### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 60 g                                    |

For further technical data [see page 334](#). For impedance = f (f) [see page 356](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_{S, typ}$<br>μH | $R_{typ}$<br>mΩ | Ordering code <sup>1)</sup> |
|------------|-------------|--------------------|-----------------|-----------------------------|
| 1          | 68          | 900                | 1300            | B82725-A2102-N1             |
| 2          | 18          | 230                | 350             | B82725-A2202-N1             |
| 4          | 6,8         | 80                 | 87              | B82725-A2402-N1             |
| 6          | 3,9         | 45                 | 41              | B82725-A2602-N1             |
| 8          | 2,7         | 30                 | 22              | B82725-A2802-N1             |
| 10         | 1,8         | 20                 | 14              | B82725-A2103-N1             |

1) Chokes with 8 pins upon request.

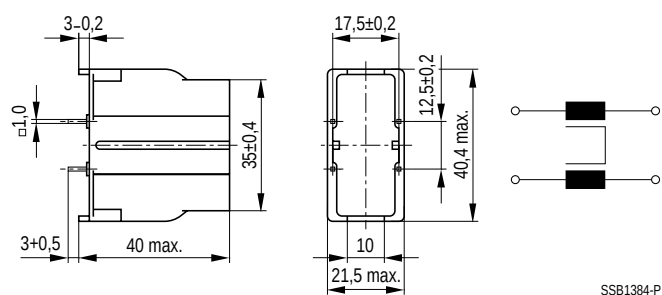


## Chokes for Power Lines

B82725-J

### Current-Compensated Ring Core Double Chokes

#### Dimensional drawings and pin configuration



#### General technical data

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Rated voltage $V_R$  | 250 Vac                                         |
| Test voltage $V_T$   | 1500 Vac, 2 s (line/line)                       |
| Rated current $I_R$  | Referred to 50 Hz and 60 °C ambient temperature |
| Inductance tolerance | ± 30 %                                          |
| Weight               | Approx. 50 g                                    |

For further technical data [see page 334](#). For impedance = f (f) [see page 356](#)

#### Characteristics and ordering codes

| $I_R$<br>A | $L_R$<br>mH | $L_S$ , typ<br>μH | $R_{typ}$<br>mΩ | Ordering code    |
|------------|-------------|-------------------|-----------------|------------------|
| 1          | 68          | 590               | 1050            | B82725-J2102-N20 |
| 2          | 18          | 170               | 270             | B82725-J2202-N20 |
| 4          | 6,8         | 60                | 77              | B82725-J2402-N20 |
| 6          | 3,9         | 34                | 34              | B82725-J2602-N20 |
| 8          | 2,7         | 26                | 20              | B82725-J2802-N20 |
| 10         | 1,8         | 18                | 13              | B82725-J2103-N22 |





## Chokes for Power Lines

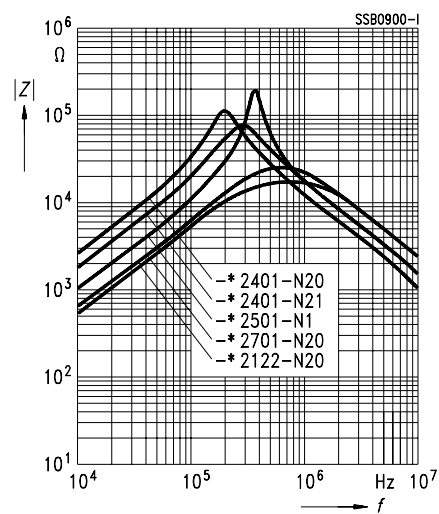
B82721

## Current-Compensated Ring Core Double Chokes

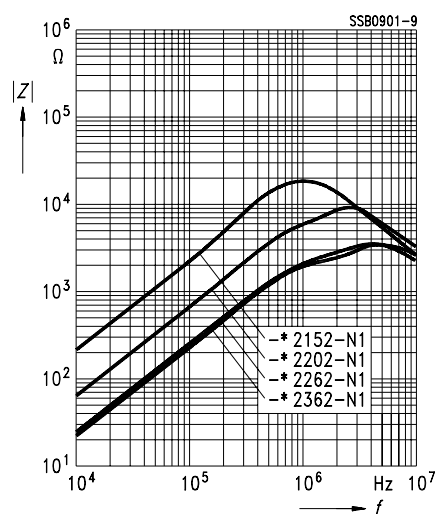
... B82723

### Impedance $|Z|$ versus frequency $f$ (measured with windings in parallel)

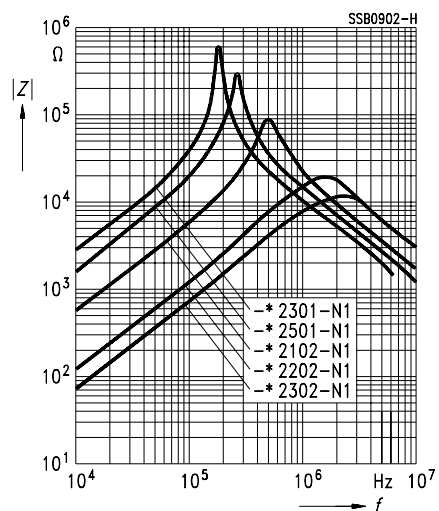
B82721-\*  
\* = A or K



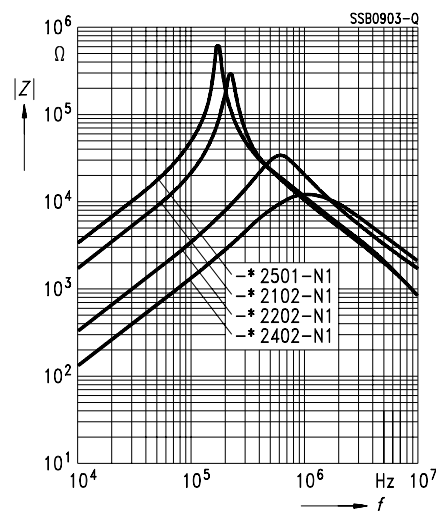
B82721-\*  
\* = A or K



B82722-\*  
\* = A or J



B82723-\*  
\* = A or J





## Chokes for Power Lines

B82724

## Current-Compensated Ring Core Double Chokes

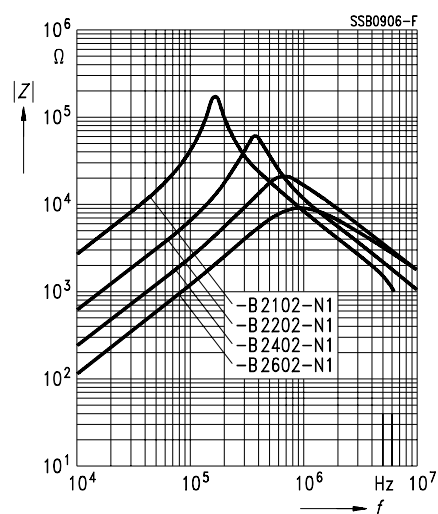
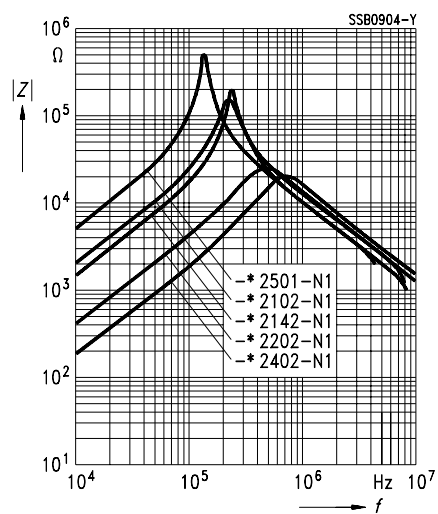
B82725

**Impedance  $|Z|$  versus frequency  $f$**   
(measured with windings in parallel)

B82724-\*

\* = A or J

B82724-B



B82725-A

B82725-J

