

RM 14

Core

B65887

- In accordance with IEC 60431
- Optimized core cross section and increased thickness of base for power applications
- Without center hole
- RM cores are supplied in sets

**Magnetic characteristics** (per set)

$\Sigma l/A = 0,35 \text{ mm}^{-1}$

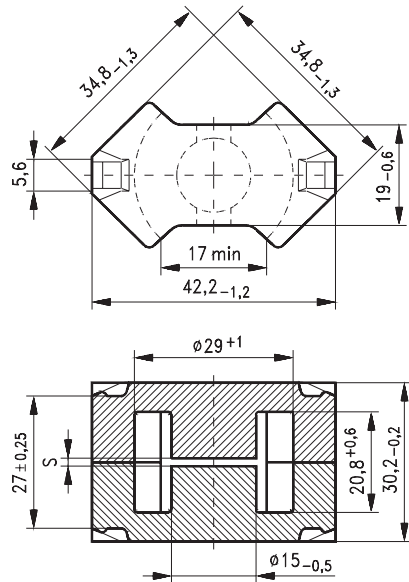
$l_e = 70 \text{ mm}$

$A_e = 200 \text{ mm}^2$

$A_{\min} = 170 \text{ mm}^2$

$V_e = 14000 \text{ mm}^3$

**Approx. weight** 74 g/set



FRM0179-L

**Gapped**

| Material | $A_L$ value<br>nH | s<br>approx.<br>mm | $\mu_e$ | Ordering code    |
|----------|-------------------|--------------------|---------|------------------|
| N41      | 160 ± 3 %         | 1,90               | 45      | B65887-E160-A41  |
|          | 250 ± 3 %         | 1,00               | 70      | B65887-E250-A41  |
|          | 400 ± 3 %         | 0,50               | 111     | B65887-E400-A41  |
|          | 1000 ± 5 %        | 0,15               | 278     | B65887-E1000-J41 |

**Ungapped**

| Material          | $A_L$ value<br>nH | $\mu_e$ | $A_{L1min}$<br>nH | $P_V$<br>W/set                      | Ordering code<br>-E without center hole |
|-------------------|-------------------|---------|-------------------|-------------------------------------|---|
| N49               | 3900 + 30/- 20 %  | 1030    | 2150              | < 2,37<br>(50 mT, 500 kHz, 100 °C)  | B65887-E-R49                            |
| N87               | 6000 + 30/- 20 %  | 1670    | 3250              | < 7,40<br>(200 mT, 100 kHz, 100 °C) | B65887-E-R87                            |
| N97 <sup>1)</sup> | 6000 + 30/- 20 %  | 1670    | 3250              | < 5,60<br>(200 mT, 100 kHz, 100 °C) | B65887-E-R97                            |
| N41               | 6800 + 30/- 20 %  | 1890    | 3250              | < 2,52<br>(200 mT, 25 kHz, 100 °C)  | B65887-E-R41                            |

1) Preliminary data

**Coil former**

Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085:  
F  $\triangleq$  max. operating temperature 155 °C), color code green

Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

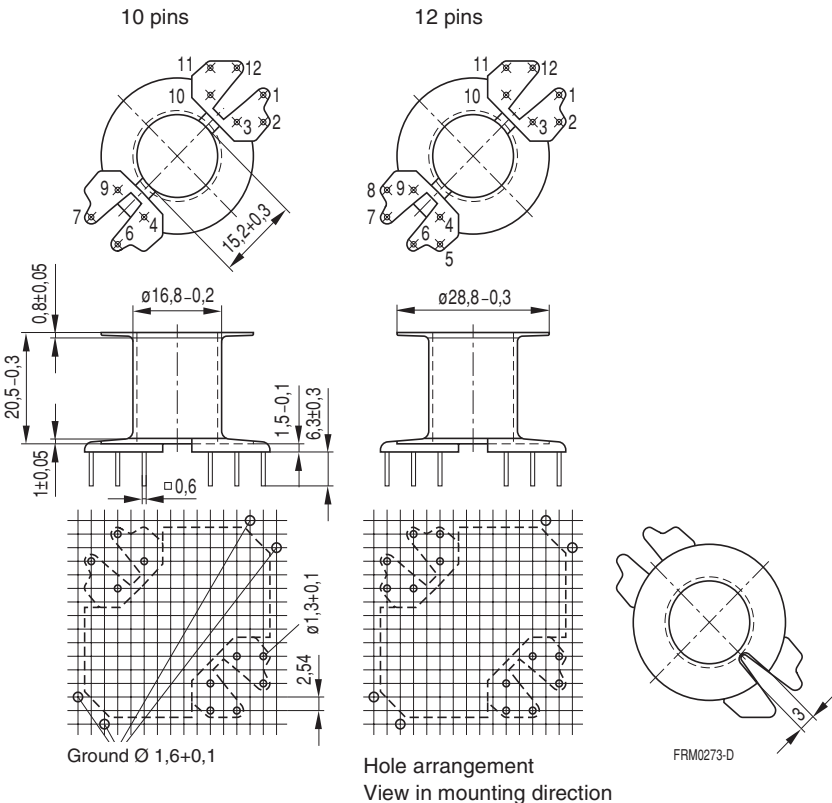
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

Squared pins

For matching clamp and insulating washers see page 255

| Sections | $A_N$<br>mm <sup>2</sup> | $l_N$<br>mm | $A_R$ value<br>$\mu\Omega$ | Pins     | Ordering code                      |
|----------|--------------------------|-------------|----------------------------|----------|------------------------------------|
| 1        | 107                      | 71,5        | 23                         | 10<br>12 | B65888-C1010-D1<br>B65888-C1012-D1 |



**Coil former for power applications**

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:  
F  $\hat{=}$  max. operating temperature 155 °C), color code black

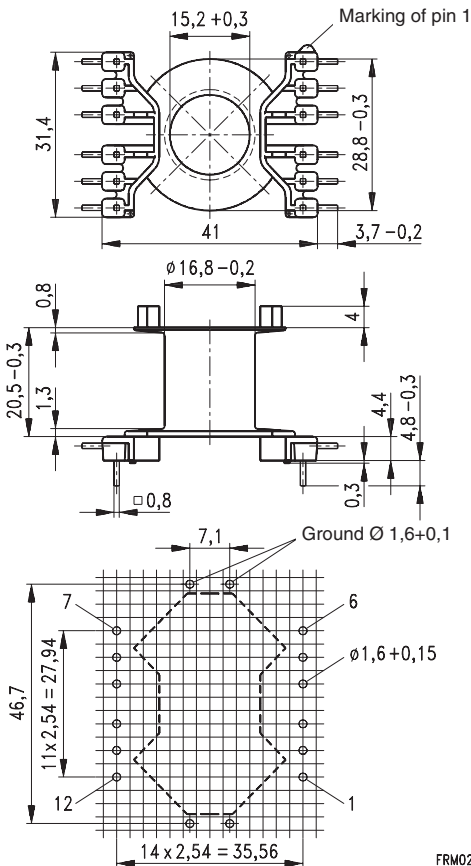
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

For matching clamp and insulating washer 1 see page 255

| Sections | $A_N$<br>mm <sup>2</sup> | $l_N$<br>mm | $A_R$ value<br>$\mu\Omega$ | Pins | Ordering code   |
|----------|--------------------------|-------------|----------------------------|------|-----------------|
| 1        | 106                      | 71,5        | 23                         | 12   | B65888-C1512-T1 |



Hole arrangement  
View in mounting direction  
(Note half pitch!)

**Clamp**

- With ground terminal, made of stainless spring steel (tinned), 0,5 mm thick
- Solderability to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

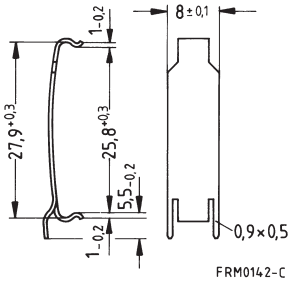
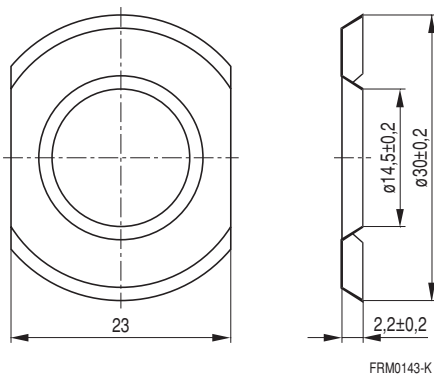
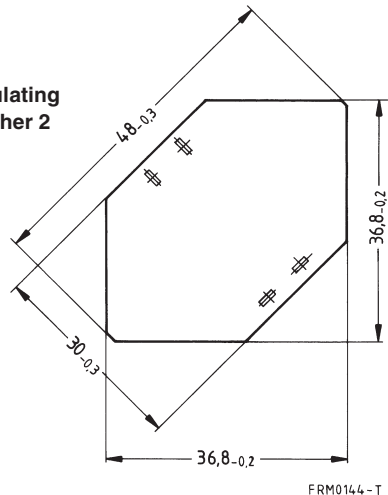
**Insulating washer 1 between core and coil former**

- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\geq$  120 °C), 0,15 mm thick

**Insulating washer 2 for double-clad PCBs**

- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\geq$  120 °C), 0,3 mm thick

|   | Ordering code |
|---|---------------|
| Clamp (ordering code per piece, 2 are required) | B65888-A2002  |
| Insulating washer 1 (reel packing, PU = 1 reel) | B65888-B5000  |
| Insulating washer 2 (bulk)                      | B65888-B2005  |

**Clamp**

**Insulating washer 1**

**Insulating washer 2**


**Herausgegeben von EPCOS AG**

**Marketing Kommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND**

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**Marketing Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY**

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