



## RM Cores

**Series/Type:** RM 8

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65811D0000R026	B65811D0000R048	2002-08-02	2002-12-31	2003-03-31
B65812N1008D002	B65812K1008D002	2003-08-08	2004-02-29	2004-08-31
B65812K1012D002	B65812N1012D002	2003-08-08	2004-02-29	2004-08-31
B65812K1005D002	B65812N1005D002	2003-08-08	2004-02-29	2004-08-31
B65812B3001X022	B65812B3003X022	2003-08-08	2004-02-29	2004-08-31
B65812B3002X022	B65812B3003X022	2003-08-08	2004-02-29	2004-08-31
B65812B3001X101	B65812B3003X022	2004-01-23		

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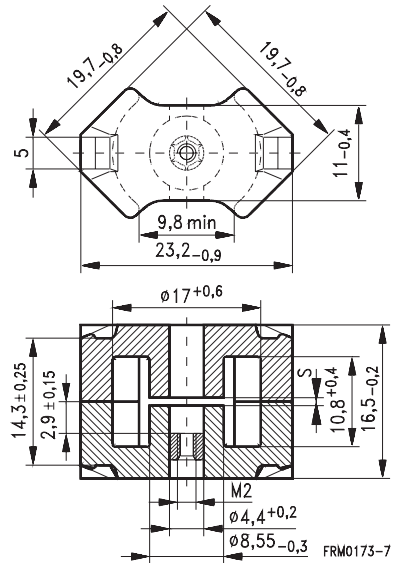
- In accordance with IEC 60431
- Cores without center hole for transformer applications
- RM cores are supplied in sets

**Magnetic characteristics (per set)**

	with center hole	without center hole	
$\Sigma I/A$	0,67	0,59	mm <sup>-1</sup>
$l_e$	35,1	38	mm
$A_e$	52	64	mm <sup>2</sup>
$A_{min}$	—	55	mm <sup>2</sup>
$V_e$	1 840	2 430	mm <sup>3</sup>

**Approx. weight (per set)**

$m$	10,7	12	g


**Gapped**

Material	$A_L$ value	$s$ approx. mm	$\mu_e$	Ordering code <sup>1)</sup> -D with center hole -F with threaded sleeve -J without center hole
	nH			
N48	250 ± 3 %	0,23	133	B65811-+250-A48
	315 ± 3 %	0,17	168	B65811-+315-A48
	400 ± 3 %	0,14	213	B65811-+400-A48
	630 ± 5 %	0,10	336	B65811-+630-J48
N41	160 ± 3 %	0,49	76	B65811-J160-A41
	250 ± 5 %	0,24	117	B65811-J250-J41
	630 ± 5 %	0,11	298	B65811-J630-J41
	1600 ± 10 %	0,04	752	B65811-J1600-K41
N87	250 ± 3 %	0,30	118	B65811-J250-A87
	400 ± 3 %	0,18	189	B65811-J400-A87

1) Replace the + by the code letter "F" or "D" for the required version. Standard version is "D".

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1min}$ nH	$P_V$ W/set	Ordering code -D with center hole -J w/o center hole
N26	2900 + 30/- 20 %	1550			B65811-D-R26
N30	5700 + 30/- 20 %	2680			B65811-J-R30
T38	12500 + 40/- 30 %	5870			B65811-J-Y38
N49	2200 + 30/- 20 %	1040	1270	< 0,37 (50 mT, 500 kHz, 100 °C)	B65811-J-R49
N87	3300 + 30/- 20 %	1560	1900	< 1,20 (200 mT, 100 kHz, 100 °C)	B65811-J-R87
N97 <sup>1)</sup>	3300 + 30/- 20 %	1560	1900	< 1,00 (200 mT, 100 kHz, 100 °C)	B65811-J-R97
N41	4100 + 30/- 20 %	1930	1900	< 0,36 (200 mT, 25 kHz, 100 °C)	B65811-J-R41

1) Preliminary data

**Coil former, squared pins**

Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085:  
H  $\geq$  max. operating temperature 180 °C), color code black

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

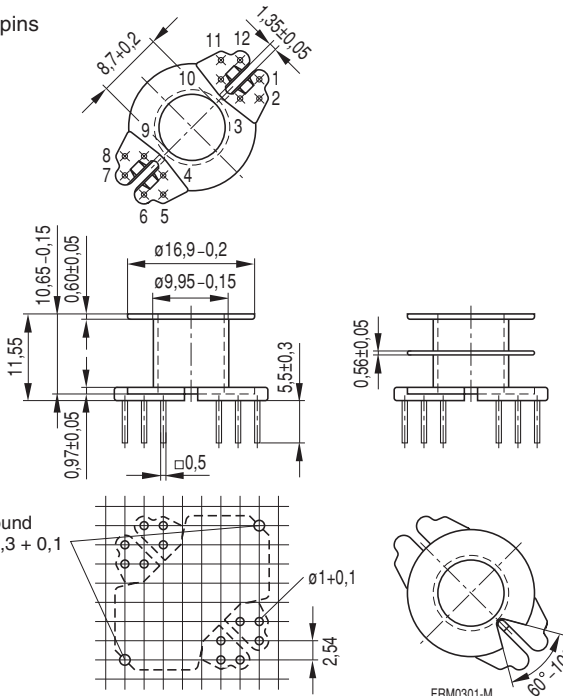
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

For matching clamp and insulating washers see page 230

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	30	42	47	5 8 8 12	B65812-N1005-D1 B65812-N1008-D1 B65812-W1008-D1 B65812-N1012-D1
2	28,4	42	50	5 8	B65812-N1005-D2 B65812-N1008-D2

12 pins



Version	Pins omitted
5 pins	3, 4, 6, 7, 9, 10, 12
8 pins	3, 4, 9, 10

Hole arrangement  
View in mounting direction

**Coil former, pins squared in the start-of-winding area**

Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085:

H  $\geq$  max. operating temperature 180 °C), color code blue

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

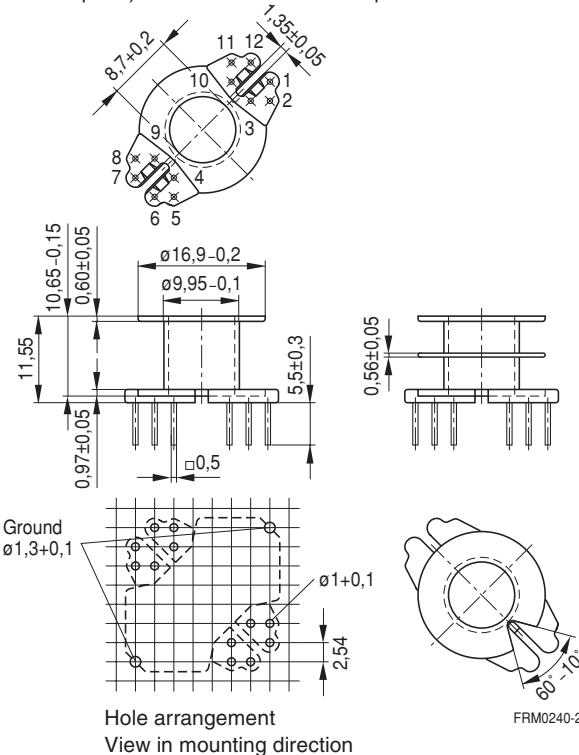
Winding: see "Processing Notes", page 153

For matching clamp and insulating washers see page 230

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	30	42	47	5	B65812-K1005-D1
				8	B65812-K1008-D1
				12	B65812-K1012-D1
2	28,4	42	50	5	B65812-K1005-D2
				12	B65812-K1012-D2

5 and 8 pins\*)

12 pins



\*) Pins 6, 7 and 12 are omitted in the 5-pin version

**Coil former for SMPS transformers with line isolation**

The creepage distances and clearances are designed such that the coil former is suitable for use in SMPS transformers with line isolation.

- Closed center flange with external wire guide
- Pins squared in the start-of-winding area
- Optimized for use with automatic winding machines

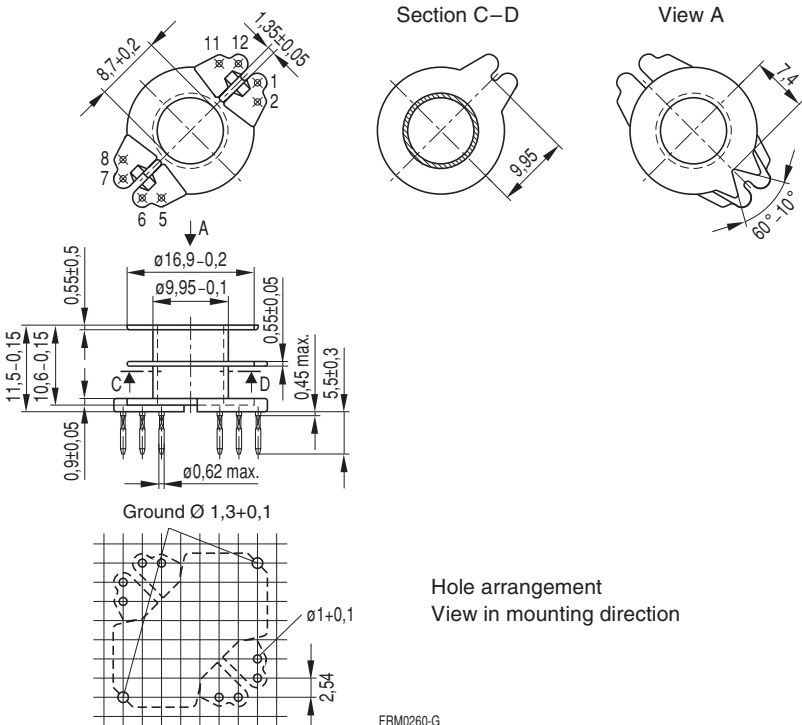
Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085:  
F  $\triangleq$  max. operating temperature 155 °C), color code green

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

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
2	28,4	42	50	8	B65812-X1108-D2



FRM0260-G

**Coil former for power applications**

Optimized for automatic winding

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:

 $F \triangleq$  max. operating temperature 155 °C), color code black

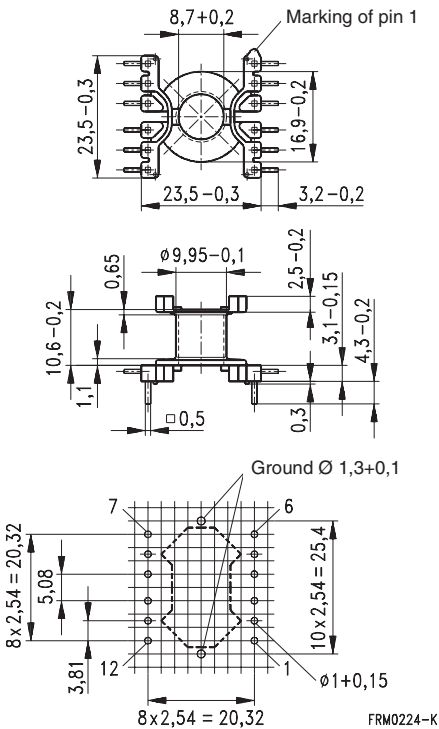
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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 230

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	30	42	47	12	B65812-C1512-T1



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

**Clamp**

- With ground terminal, made of stainless spring steel (tinned), 0,4 mm thick
- Solderability to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s
- Also available as strip clamp on reels

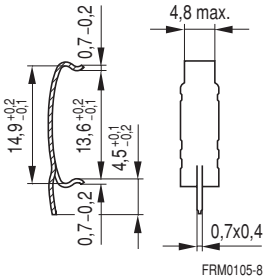
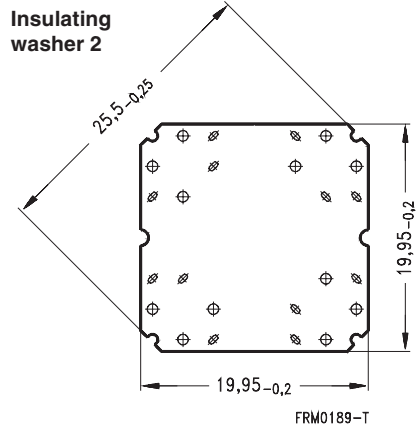
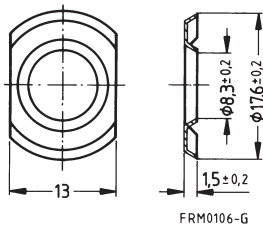
**Insulating washer 1 between core and coil former**

- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\geq$  120 °C), 0,08 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)	B65812-A2203
Insulating washer 1 (reel packing, PU = 1 reel)	B65812-A5000
Insulating washer 2 (bulk)	B65812-C2005

**Clamp**

**Insulating washer 1**




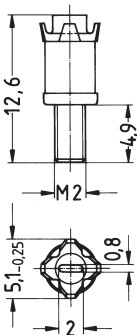
<b>RM 8</b>	<b>B63399</b>
<b>Accessories</b>	<b>B65812</b>

### Adjusting screw

- Tube core with thread and core brake made of GFR polyterephthalate
- Plastic **adjusting screwdriver** (not shown)
- Plastic **handle** for adjusting screwdriver (not shown)

Core RM 8		Adjusting screw			Min. adjusting range %	Ordering code
Material	A <sub>L</sub> value nH	Tube core Ø × length mm	Material	Color code		
N 48	250	4,18 × 5,0	Si 1	white	12	B65812-B3001-X101
	315	3,85 × 5,0	N 22	gray	13	B65812-B3003-X22
	400	4,18 × 4,0	N 22	brown	17	B65812-B3002-X22
	630	4,18 × 5,0	N 22	black	9	B65812-B3001-X22
<b>Adjusting screwdriver</b>						B63399-B1
<b>Handle</b>						B63399-B5

### Adjusting screw



FRM0108-X

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

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**Published by EPCOS AG**

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