



## RM Cores

**Series/Type:**      **RM 10**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65814N1011D001	B65814N1012D001	2003-08-08	2004-02-29	2004-08-31
B65814N1010D001	B65814K1010D001	2003-08-08	2004-02-29	2004-08-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at [www.epcos.com/sales](http://www.epcos.com/sales).

**RM 10**
**Core**
**B65813**

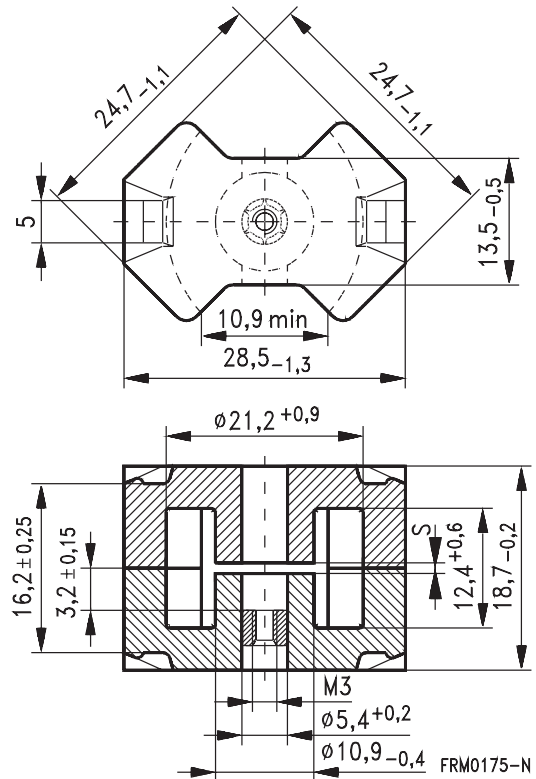
- In accordance with IEC 60431
- Cores without center hole for transformer applications
- RM cores are supplied in sets

**Magnetic characteristics (per set)**

	with center hole	without center hole	
$\Sigma l/A$	0,5	0,45	mm <sup>-1</sup>
$l_e$	42	44	mm
$A_e$	83	98	mm <sup>2</sup>
$A_{min}$	—	90	mm <sup>2</sup>
$V_e$	3 470	4 310	mm <sup>3</sup>

**Approx. weight (per set)**

$m$	20,7	22	g


**Gapped**

Material	$A_L$ value	$s$	$\mu_e$	Ordering code <sup>1)</sup> -D with center hole -N with threaded sleeve -J without center hole
	nH	approx. mm		
N48	400 ± 3 %	0,21	160	B65813-+400-A48
	630 ± 3 %	0,13	250	B65813-+630-A48
N41	250 ± 3 %	0,44	90	B65813-J250-A41
	630 ± 5 %	0,13	226	B65813-J630-J41
	1600 ± 10 %	0,04	573	B65813-J1600-K41

1) Replace the + by the code letter "D" or "N" for the required version.

**RM 10**
**Core**
**B65813**
**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1min}$ nH	$P_V$ W/set	Ordering code -J w/o center hole
N30	7600 + 30/- 20 %	2720			B65813-J-R30
T38	16000 + 40/- 30 %	5730			B65813-J-Y38
N49	2900 + 30/- 20 %	1040	1680	< 0,75 (50 mT, 500 kHz, 100 °C)	B65813-J-R49
N87	4200 + 30/- 20 %	1500	2550	< 2,30 (200 mT, 100 kHz, 100 °C)	B65813-J-R87
N97 <sup>1)</sup>	4200 + 30/- 20 %	1500	2550	< 2,00 (200 mT, 100 kHz, 100 °C)	B65813-J-R97
N41	5500 + 30/- 20 %	1960	2550	< 0,80 (200 mT, 25 kHz, 100 °C)	B65813-J-R41

1) Preliminary data

**Coil former**

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

$H \triangleq$  max. operating temperature 180 °C), color code black

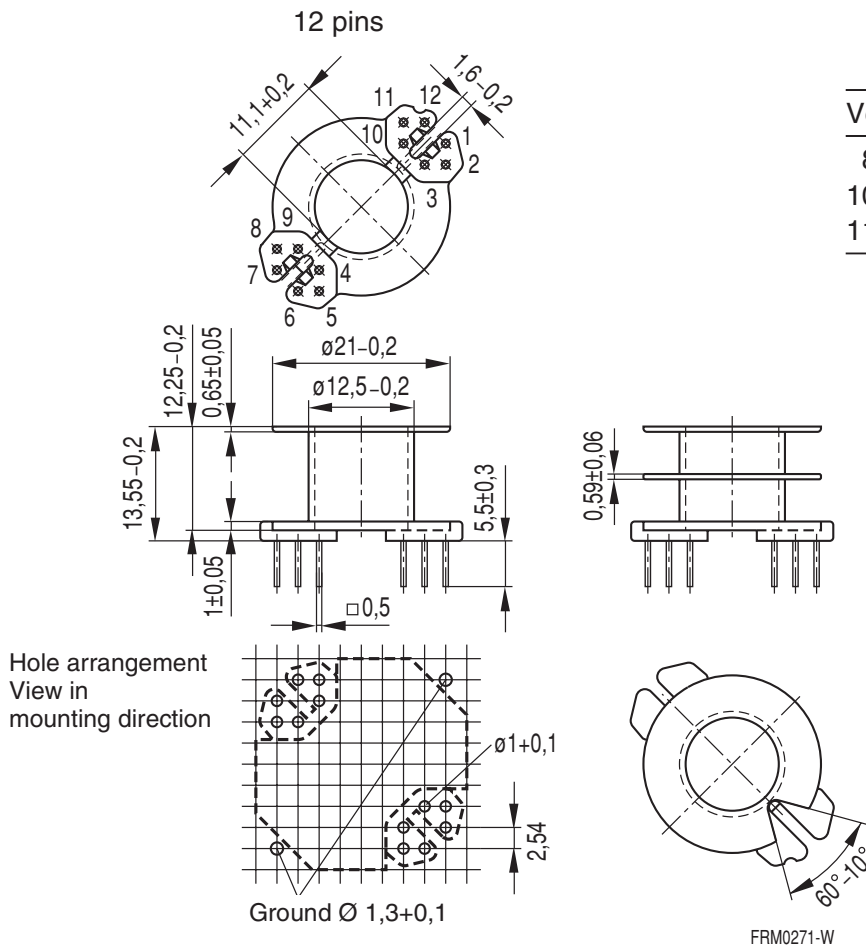
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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

Winding: see "Processing Notes", page 153

Squared pins. For matching clamp and insulating washers see page 240.

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	41,5	52	43	8	B65814-N1008-D1
				10	B65814-N1010-D1
				11	B65814-N1011-D1
				12	B65814-N1012-D1
2	39	52	46	8	B65814-N1008-D2



Version	Pins omitted
8 pins	2, 5, 8, 11
10 pins	2, 11
11 pins	9

**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

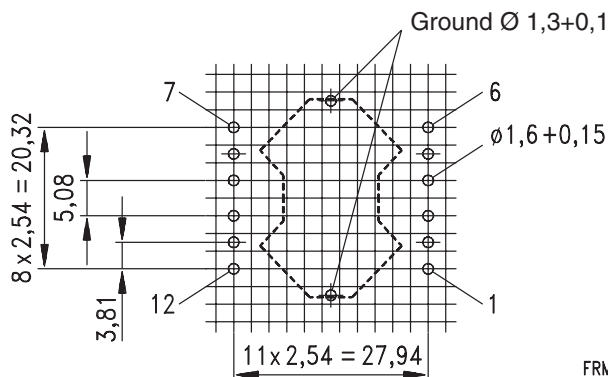
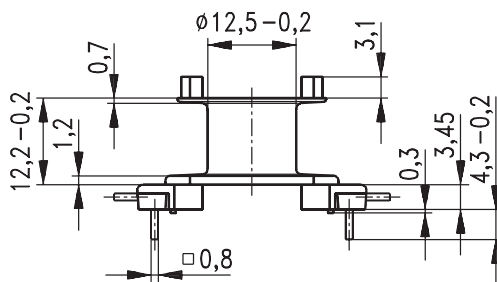
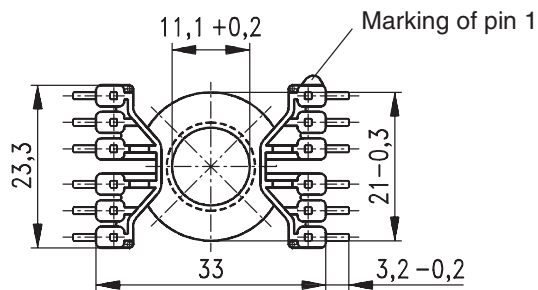
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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 240

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	41,5	52	43	12	B65814-C1512-T1



FRM0225-T

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

**Clamp**

- With ground terminal, made of stainless spring steel (tinned), 0,45 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

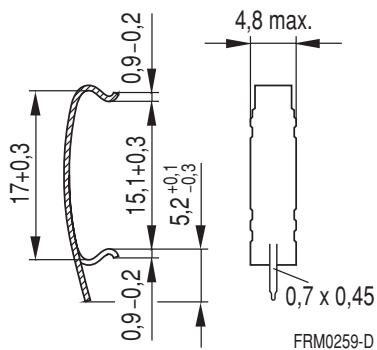
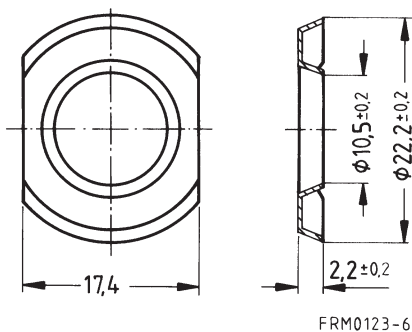
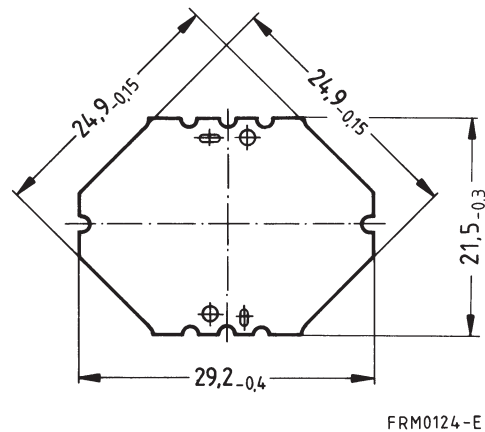
**Insulating washer 1** between core and coil former

- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\geq$  120 °C), 0,1 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)	B65814-A2203
Insulating washer 1 (reel packing, PU = 1 reel)	B65814-B5000
Insulating washer 2 (bulk)	B65814-B2005

**Clamp**

**Insulating washer 1**

**Insulating washer 2**


### Adjusting screw

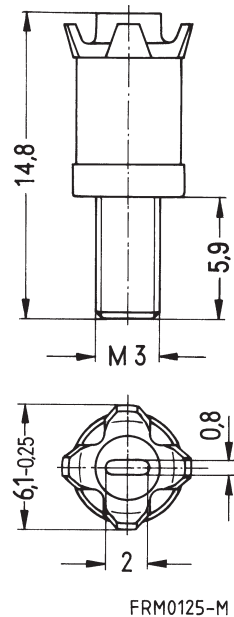
- Tube core with thread and core brake made of GFR polyterephthalate

Plastic **adjusting screwdriver** (not shown)

Plastic **handle** for adjusting screwdriver (not shown)

Core RM 10		Adjusting screw			Min. adjusting range %	Ordering code
Material	A <sub>L</sub> value nH	Tube core ∅ × length mm	Material	Color code		
N 48	400	4,55 × 6,3	N 22	red	10	B65679-E3-X22
	400 630	4,98 × 6,3	N 22	black	18 11	B65679-E2-X22
	630	5,15 × 6,3	N 22	white	17	B65679-E1-X22
<b>Adjusting screwdriver</b>						B63399-B1
<b>Handle</b>						B63399-B5

### Adjusting screw



**Herausgegeben von EPCOS AG**

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

© EPCOS AG 2000. Alle Rechte vorbehalten. Vervielfältigung, Veröffentlichung, Verbreitung und Verwertung dieser Broschüre und ihres Inhalts ohne ausdrückliche Genehmigung der EPCOS AG nicht gestattet.

Mit den Angaben in dieser Broschüre werden die Bauelemente spezifiziert, keine Eigenschaften zugesichert. Bestellungen unterliegen den vom ZVEI empfohlenen Allgemeinen Lieferbedingungen für Erzeugnisse und Leistungen der Elektroindustrie, soweit nichts anderes vereinbart wird.

Diese Broschüre ersetzt die vorige Ausgabe.

Fragen über Technik, Preise und Liefermöglichkeiten richten Sie bitte an den Ihnen nächstgelegenen Vertrieb der EPCOS AG oder an unsere Vertriebsgesellschaften im Ausland.

Bauelemente können aufgrund technischer Erfordernisse Gefahrstoffe enthalten. Auskünfte darüber bitten wir unter Angabe des betreffenden Typs ebenfalls über die zuständige Vertriebsgesellschaft einzuholen.

**Published by EPCOS AG**

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

© EPCOS AG 2000. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.