



## RM Cores

**Series/Type:**        **RM 12**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65816D20050000		2004-10-18	2005-03-31	2005-09-30

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 12

Core

B65815

- 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)

$\Sigma l/A = 0,39 \text{ mm}^{-1}$

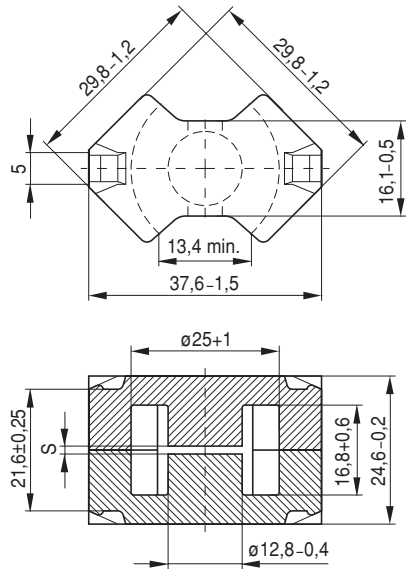
$l_e = 57 \text{ mm}$

$A_e = 146 \text{ mm}^2$

$A_{\text{min}} = 125 \text{ mm}^2$

$V_e = 8340 \text{ mm}^3$

**Approx. weight** 45 g/set



FRM0300-E

**Gapped**

Material	$A_L$ value nH	s approx. mm	$\mu_e$	Ordering code
				-E without center hole
N41	160 ± 3 %	1,30	50	B65815-E160-A41
	250 ± 3 %	0,70	78	B65815-E250-A41
	400 ± 3 %	0,35	124	B65815-E400-J41
	1000 ± 5 %	0,12	310	B65815-E1000-J41

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1min}$ nH	$P_V$ W/set	Ordering code -E w/o center hole
N30	8400 + 30/- 20 %	2610			B65815-E-R30
N49	3700 + 30/- 20 %	1090	1930	< 1,41 (50 mT, 500 kHz, 100 °C)	B65815-E-R49
N87	5300 + 30/- 20 %	1640	2900	< 4,50 (200 mT, 100 kHz, 100 °C)	B65815-E-R87
N97 <sup>1)</sup>	5300 + 30/- 20 %	1640	2900	< 3,60 (200 mT, 100 kHz, 100 °C)	B65815-E-R97
N41	6000 + 30/- 20 %	1860	2900	< 1,50 (200 mT, 25 kHz, 100 °C)	B65815-E-R41

1) Preliminary data

**Coil former**

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

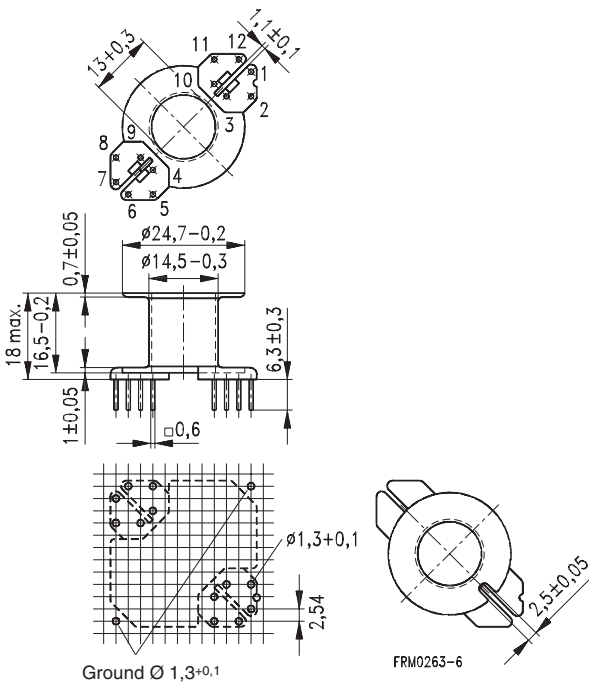
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

Squared pins

For matching clamp and insulating washers see page 248

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	73	61	28,7	12	B65816-N1012-D1



Ground  $\varnothing 1,3^{+0,1}$

FRM0263-6

Hole arrangement  
View in mounting direction

**Coil former for power applications**

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

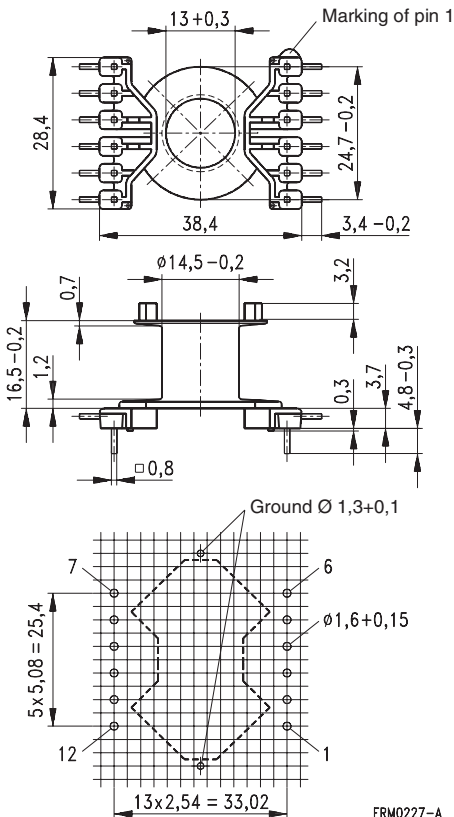
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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 248

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	72	61	28,7	12	B65816-C1512-T1



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

FRM0227-A

**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

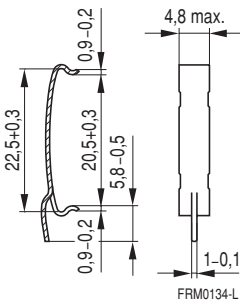
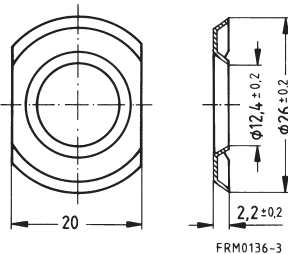
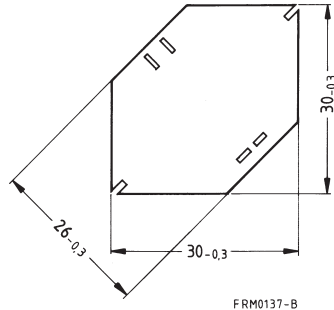
**Insulating washer 1 between core and coil former**

- 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)	B65816-A2002
Insulating washer 1 (reel packing, PU = 1 reel)	B65816-B5000
Insulating washer 2 (bulk)	B65816-D2005

**Clamp**

**Insulating washer 1**

**Insulating washer 2**


**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.