



Ferrites and Accessories

Series/Type: **RM 4**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65803A0000R026	B65803A0000R048	2002-08-02	2002-12-31	2003-03-31

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.

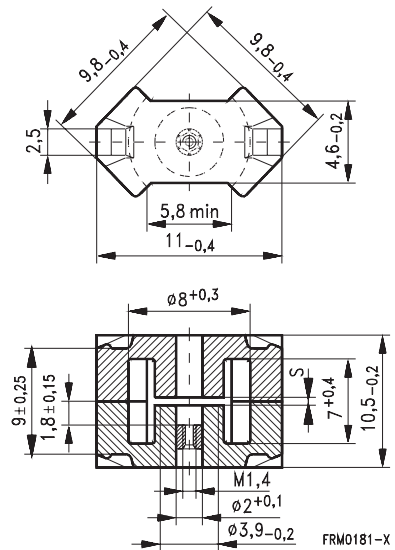
- In accordance with IEC 60431
- Core without center hole for transformer applications
- RM cores are supplied in sets

Magnetic characteristics (per set)

	with center hole	without center hole	
$\Sigma l/A$	1,9	1,7	mm ⁻¹
l_e	21	22	mm
A_e	11	13	mm ²
A_{min}	—	11,3	mm ²
V_e	232	286	mm ³

Approx. weight (per set)

m	1,45	1,65	g


Gapped

Material	A_L value nH	s approx. mm	μ_e	Ordering code 1) -A with center hole -N with threaded sleeve
K1	16 ± 3 %	1,0	24,2	B65803--+16-A1
	25 ± 3 %	0,40	37,8	B65803--+25-A1
M33	40 ± 3 %	0,36	60,4	B65803--+40-A33
	63 ± 3 %	0,18	95	B65803--+63-A33
N48	63 ± 3 %	0,16	95	B65803--+63-A48
	100 ± 3 %	0,10	151	B65803--+100-A48
	160 ± 3 %	0,06	242	B65803--+160-A48

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

Ungapped

Material	A_L value nH	μ_e	A_{L1min} nH	P_V W/set	Ordering code -J w/o center hole
N30	1900 + 30/- 20 %	2570			B65803-J-R30
T35	2800 + 40/- 30 %	3790			B65803-J-Y35
T38	3700 + 40/- 30 %	5000			B65803-J-Y38
T57 ¹⁾	1600 + 30/- 20 %	2200			B65803-J-R57
N49	750 + 30/- 20 %	1010	450	< 0,04 (50 mT, 500 kHz, 100 °C)	B65803-J-R49
N87	1100 + 30/- 20 %	1480	650	< 0,20 (200 mT, 100 kHz, 100 °C)	B65803-J-R87
N97 ¹⁾	1100 + 30/- 20 %	1480	650	< 0,15 (200 mT, 100 kHz, 100 °C)	B65803-J-R97

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 blue

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

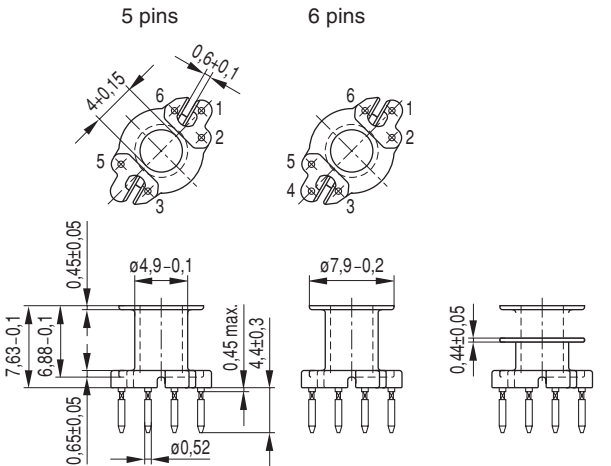
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

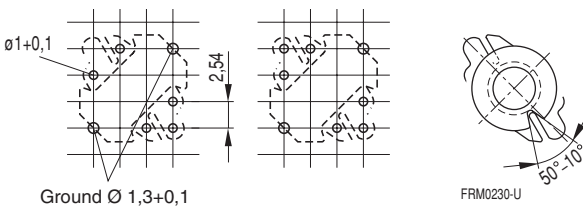
Pins squared in the start-of-winding area

For matching clamp and insulating washers see page 187

Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	Ordering code
1	7,7	20	89	5	B65804-K1005-D1
				6	B65804-K1006-D1
2	7,3	20	94	5	B65804-K1005-D2
				6	B65804-K1006-D2



Hole arrangement
View in mounting direction



RM 4	B65804
Accessories	B65806

Clamp

- With ground terminal, made of stainless spring steel (tinned), 0,335 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

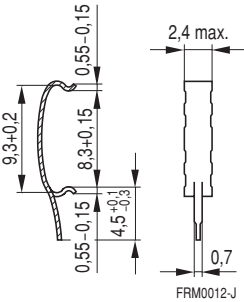
- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E \geq 120 °C), 0,06 mm thick

Insulating washer 2 for double-clad PCBs

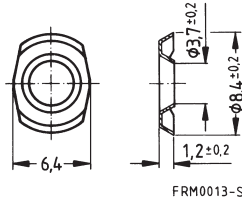
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E \geq 120 °C), 0,3 mm thick

	Ordering code
Clamp (ordering code per piece, 2 are required)	B65806-A2203
Insulating washer 1 (reel packing, PU = 1 reel)	B65804-A5000
Insulating washer 2 (bulk)	B65804-C2005

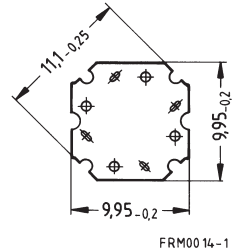
Clamp



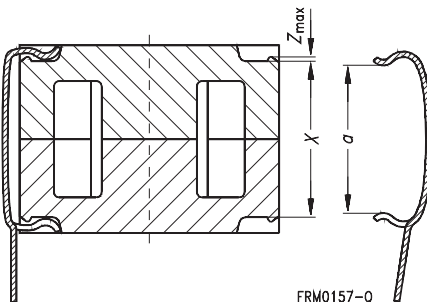
Insulating washer 1



Insulating washer 2



Clamping forces for RM 4



F_{min} : Extension of clamp from a to $a_2 = X_{min}$
 F_{max} : Extension of clamp from a to $a_1 = X_{max}$

Clamp opening a (mm)	8,3 + 0,15
Core nose Z_{max} (mm)	0,15
Height of core pair X (mm)	X_{min} 8,75 X_{max} 9,25
Clamping force F (N)	F_{min} 5 F_{max} 40

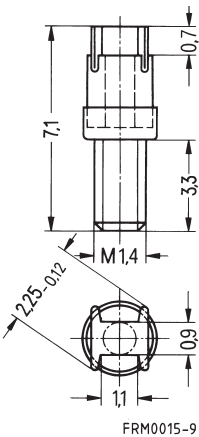
RM 4	B65539
Accessories	B63399

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 4		Adjusting screw			Min. adjusting range %	Ordering code
Material	A _L value nH	Tube core Ø × length mm	Material	Color code		
K 1	16	1,81 × 2,0	Si 1	black	20	B65539-C1003-X101
	25	1,81 × 2,0	K 1	yellow	21	B65539-C1003-X1
M 33	40	1,81 × 2,0	Si 1	black	17	B65539-C1003-X101
	63	1,81 × 2,0	K 1	yellow	21	B65539-C1003-X1
N 48	63	1,81 × 2,0	Si 1	black	12	B65539-C1003-X101
	100	1,81 × 2,0	K 1	yellow	17	B65539-C1003-X1
	160	1,81 × 2,7	N 22	red	12	B65539-C1002-X22
Adjusting screwdriver						B63399-B4
Handle						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.