



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The following products presented in this data sheet are being withdrawn.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

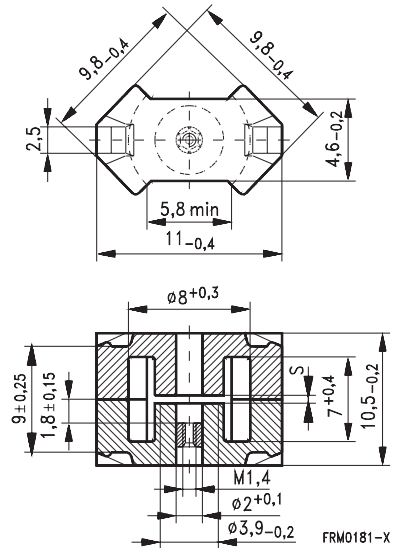
- In accordance with IEC 60431
- Core without center hole for transformer applications
- RM cores are supplied in sets

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	$16 \pm 3 \%$	1,0	24,2	B65803--+16-A1
	$25 \pm 3 \%$	0,40	37,8	B65803--+25-A1
M33	$40 \pm 3 \%$	0,36	60,4	B65803--+40-A33
	$63 \pm 3 \%$	0,18	95	B65803--+63-A33
N48	$63 \pm 3 \%$	0,16	95	B65803--+63-A48
	$100 \pm 3 \%$	0,10	151	B65803--+100-A48
	$160 \pm 3 \%$	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

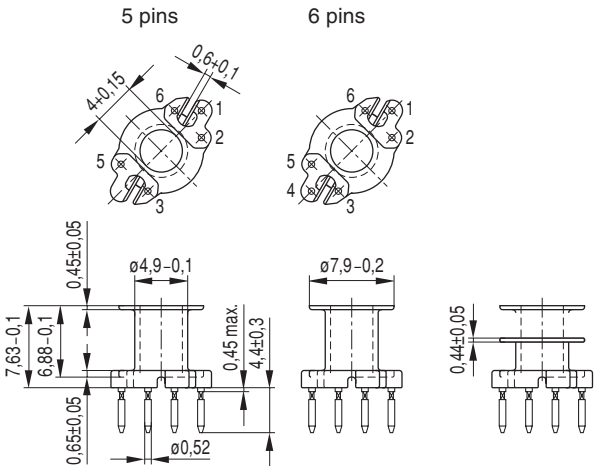
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

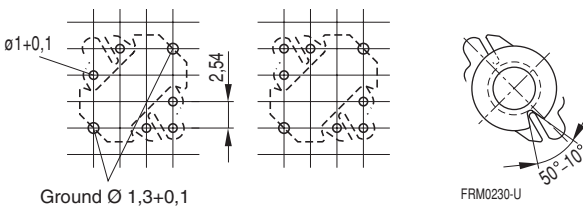
Pins squared in the start-of-winding area

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 6	B65804-K1005-D1 B65804-K1006-D1
2	7,3	20	94	5 6	B65804-K1005-D2 B65804-K1006-D2



Hole arrangement
View in mounting direction



FRM0230-U

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

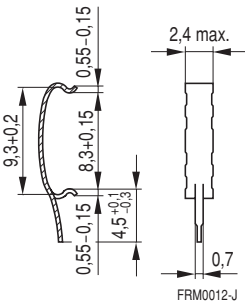
- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E \geq 120 °C), 0,06 mm thick

Insulating washer 2 for double-clad PCBs

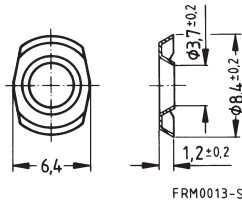
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E \geq 120 °C), 0,3 mm thick

	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

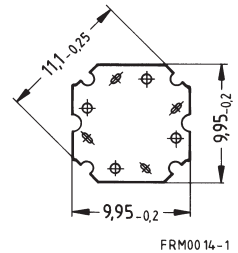
Clamp



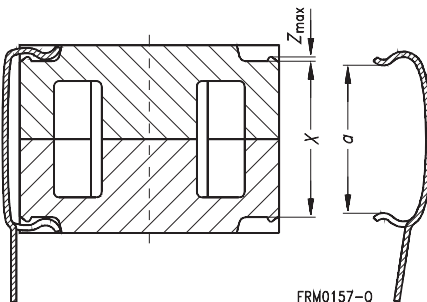
Insulating washer 1



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

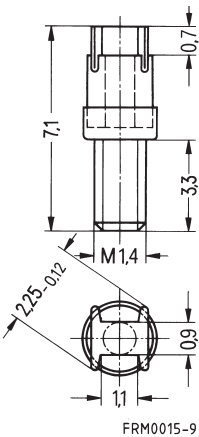
RM 4	B65539
Accessories	B63399

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



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