

# DATA SHEET

## **RM4**

**RM, RM/I, RM/ILP cores and accessories**

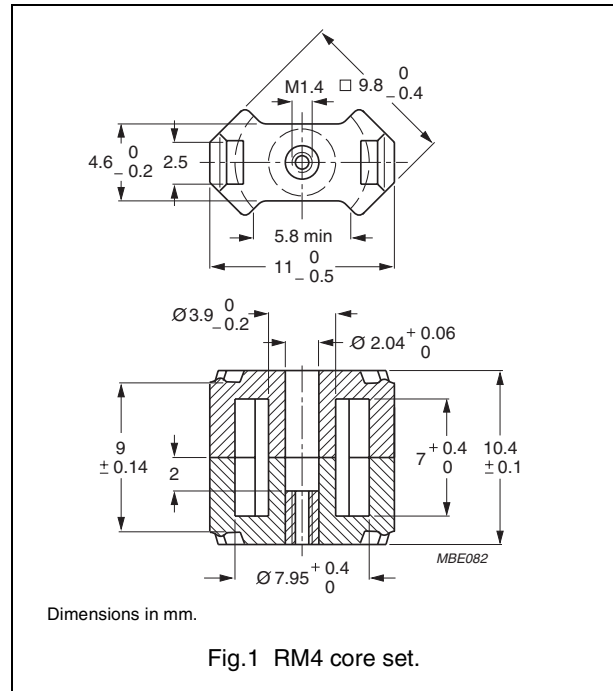
Supersedes data of September 2004

2008 Sep 01

**CORE SETS**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.94	mm <sup>-1</sup>
$V_e$	effective volume	230	mm <sup>3</sup>
$l_e$	effective length	21.3	mm
$A_e$	effective area	11.0	mm <sup>2</sup>
$A_{min}$	minimum area	8.1	mm <sup>2</sup>
m	mass of set	≈ 1.5	g



**Core sets for filter applications**

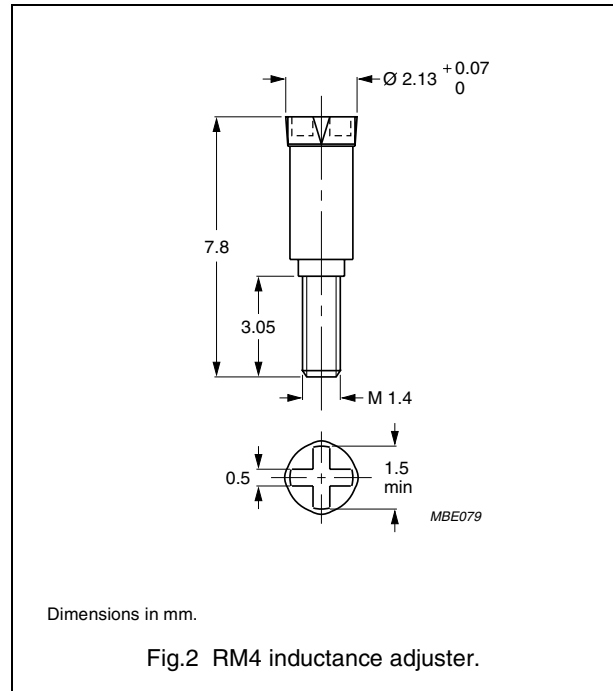
Clamping force for  $A_L$  measurements, 20 ± 10 N.

GRADE	$A_L$ (nH)	$\mu_e$	TOTAL AIR GAP (μm)	TYPE NUMBER (WITH NUT)	TYPE NUMBER (WITHOUT NUT)
3D3 <sup>sup</sup>	40 ± 3%	≈ 62	≈ 470	RM4-3D3-E40/N	RM4-3D3-E40
	63 ± 3%	≈ 97	≈ 250	RM4-3D3-A63/N	RM4-3D3-A63
	400 ± 25%	≈ 616	≈ 0	–	RM4-3D3
3H3 <sup>sup</sup>	63 ± 3%	≈ 97	≈ 280	RM4-3H3-A63/N	RM4-3H3-A63
	100 ± 3%	≈ 154	≈ 160	RM4-3H3-A100/N	RM4-3H3-A100
	160 ± 3%	≈ 247	≈ 85	RM4-3H3-A160/N	RM4-3H3-A160
	900 ± 25%	≈ 1390	≈ 0	–	RM4-3H3

**INDUCTANCE ADJUSTERS**

**General data**

PARAMETER	SPECIFICATION
Material of head and thread	polypropylene (PP), glass fibre reinforced
Maximum operating temperature	125 °C



**Inductance adjuster selection chart <sup>sup</sup> (applies to all types)**

GRADE	A <sub>L</sub> (nH)	TYPES FOR LOW ADJUSTMENT	ΔL/L % <sup>(1)</sup>	TYPES FOR MEDIUM ADJUSTMENT	ΔL/L % <sup>(1)</sup>	TYPES FOR HIGH ADJUSTMENT	ΔL/L % <sup>(1)</sup>
3H3; 3D3	63	–	–	–	–	ADJ-RM4/RM5-RED	27
	100	–	–	ADJ-RM4/RM5-RED	17	ADJ-RM4/RM5-BROWN	25
	160	ADJ-RM4/RM5-GREEN	5	ADJ-RM4/RM5-BROWN	14	ADJ-RM4/RM5-GREY	26
	250	ADJ-RM4/RM5-RED	5	ADJ-RM4/RM5-GREY	12	ADJ-RM4/RM5-BLACK	17

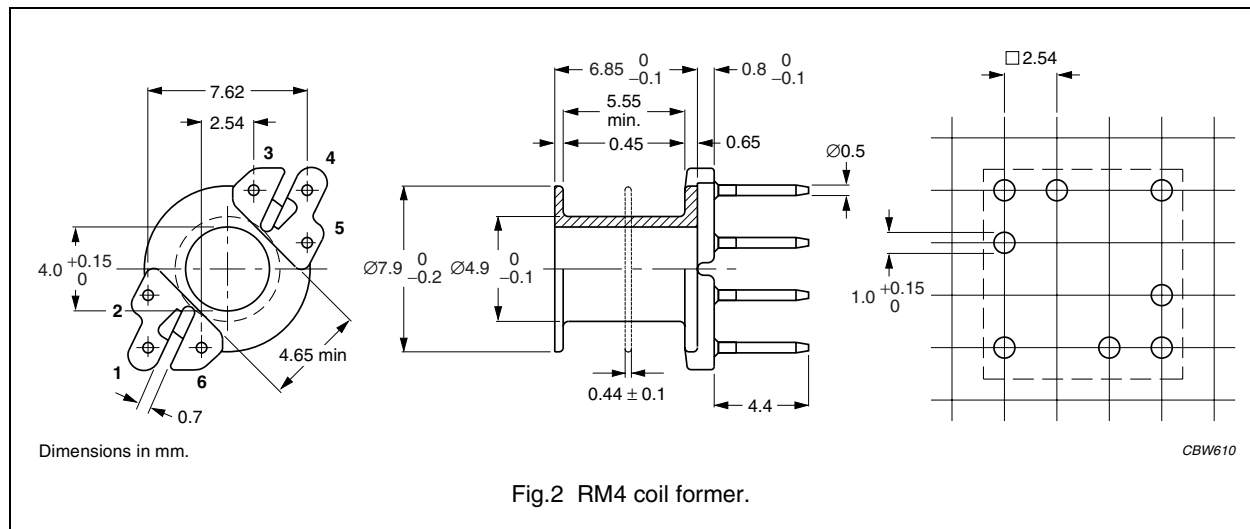
**Note**

1. Maximum adjustment range.

**COIL FORMER**

**General data**

PARAMETER	SPECIFICATION
Coil former material	polyester (UP), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E61040(M)
Pin material	copper-tin alloy (CuSn), tin (Sn) plated
Maximum operating temperature	180 °C, "IEC 60085", class H
Resistance to soldering heat	"IEC 60068-2-20", Part 2, Test Tb, method 1B, 350 °C, 3.5 s
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1



**Winding data and area product for RM4 coil former**

NUMBER OF SECTIONS	NUMBER OF PINS	PIN POSITIONS USED	AVERAGE LENGTH OF TURN (mm)	WINDING AREA (mm <sup>2</sup> )	WINDING WIDTH (mm)	AREA PRODUCT Ae x Aw (mm <sup>4</sup> )	TYPE NUMBER
1	6	all	20	7.4	5.55	81.4	CSV-RM4-1S-6P <sup>(1)</sup>
1	5	1, 2, 3, 5, 6	20	7.4	5.55	81.4	CSV-RM4-1S-5P <sup>(1)</sup>
2	5	1, 2, 3, 5, 6	20	7	2 x 2.55	77.0	CSV-RM4-2S-5P

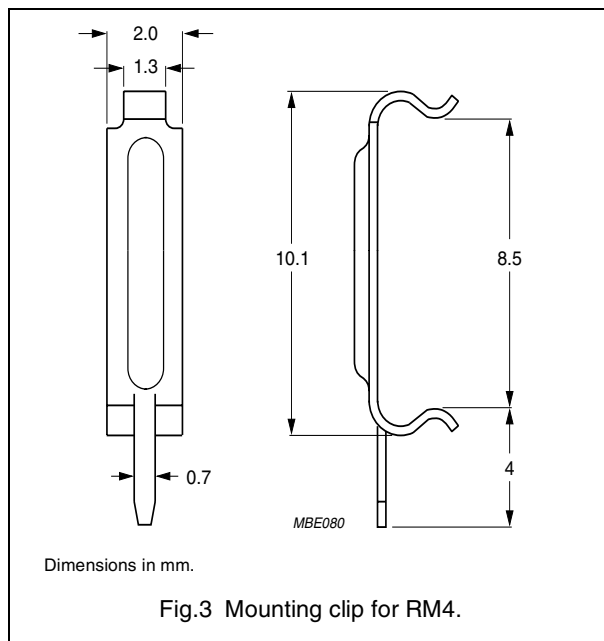
**Note**

- 1. Also available with post-inserted pins.

**MOUNTING PARTS**

**General data**

ITEM	SPECIFICATION
Clamping force	≈10 N
Clip material	steel
Clip plating	silver (Ag)
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1
Type number	CLI/P-RM4/5






**DATA SHEET STATUS DEFINITIONS**

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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**PRODUCT STATUS DEFINITIONS**

STATUS	INDICATION	DEFINITION
<b>Prototype</b>		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		These products are <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.