

# DATA SHEET

## **RM6R** RM cores and accessories

Product specification  
Supersedes data of 1997 Nov 21  
File under Magnetic Products, MA01

1999 Jan 18

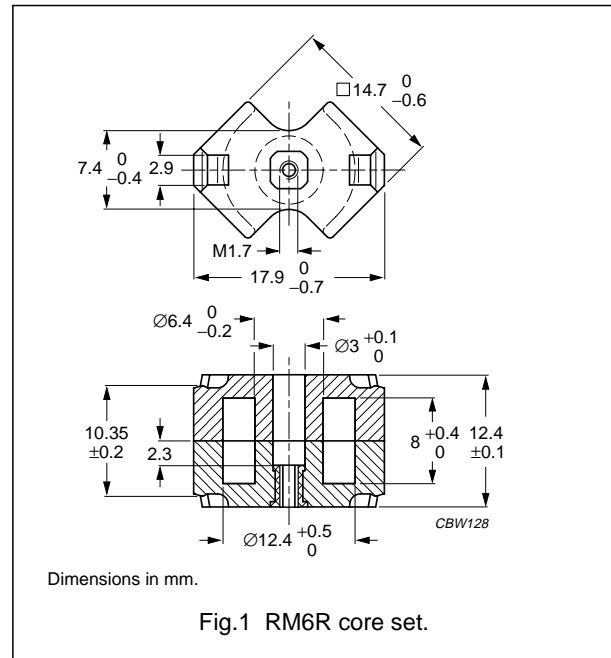
## RM cores and accessories

## RM6R

## CORE SETS

## Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.810	mm <sup>-1</sup>
$V_e$	effective volume	810	mm <sup>3</sup>
$l_e$	effective length	25.6	mm
$A_e$	effective area	32.0	mm <sup>2</sup>
$A_{min}$	minimum area	23.8	mm <sup>2</sup>
$m$	mass of set	≈4.5	g



## Core sets for filter applications

Clamping force 40 ±20 N.

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu\text{m}$ )	TYPE NUMBER (WITH NUT)	TYPE NUMBER (WITHOUT NUT)
4C6 <sup>sup</sup>	25 ±3%	≈16	≈2500	RM6R-4C6-E25/N	RM6R-4C6-E25
	40 ±3%	≈26	≈1000	RM6R-4C6-E40/N	RM6R-4C6-E40
	63 ±3%	≈41	≈400	RM6R-4C6-E63/N	RM6R-4C6-E63
	150 ±25%	≈97	≈0	–	RM6R-4C6
3D3 <sup>sup</sup>	40 ±3%	≈26	≈1200	RM6R-3D3-E40/N	RM6R-3D3-E40
	63 ±3%	≈41	≈700	RM6R-3D3-E63/N	RM6R-3D3-E63
	100 ±3%	≈65	≈400	RM6R-3D3-E100/N	RM6R-3D3-E100
	160 ±3%	≈103	≈200	RM6R-3D3-A160/N	RM6R-3D3-A160
	1000 ±25%	≈650	≈0	–	RM6R-3D3
3H3 <sup>sup</sup>	160 ±3%	≈103	≈230	RM6R-3H3-A160/N	RM6R-3H3-A160
	250 ±3%	≈161	≈110	RM6R-3H3-A250/N	RM6R-3H3-A250
	315 ±3%	≈203	≈90	RM6R-3H3-A315/N	RM6R-3H3-A315
	400 ±3%	≈258	≈70	RM6R-3H3-A400/N	RM6R-3H3-A400
	2200 ±25%	≈1420	≈0	–	RM6R-3H3

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GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu\text{m}$ )	TYPE NUMBER (WITH NUT)	TYPE NUMBER (WITHOUT NUT)
3H1 <sup>sup</sup>	160 $\pm$ 3%	$\approx$ 103	$\approx$ 230	RM6R-3H1-A160/N	RM6R-3H1-A160
	250 $\pm$ 3%	$\approx$ 161	$\approx$ 110	RM6R-3H1-A250/N	RM6R-3H1-A250
	315 $\pm$ 3%	$\approx$ 203	$\approx$ 90	RM6R-3H1-A315/N	RM6R-3H1-A315
	400 $\pm$ 3%	$\approx$ 258	$\approx$ 70	RM6R-3H1-A400/N	RM6R-3H1-A400
	630 $\pm$ 5%	$\approx$ 406	$\approx$ 50	RM6R-3H1-A630/N	RM6R-3H1-A630
	1000 $\pm$ 10%	$\approx$ 650	$\approx$ 25	RM6R-3H1-A1000/N	RM6R-3H1-A1000
	1250 $\pm$ 10%	$\approx$ 805	$\approx$ 20	RM6R-3H1-A1250/N	RM6R-3H1-A1250
	2450 $\pm$ 25%	$\approx$ 1580	$\approx$ 0	–	RM6R-3H1
3B7 <sup>sup</sup>	100 $\pm$ 3%	$\approx$ 63	$\approx$ 490	RM6R-3B7-E100/N	RM6R-3B7-E100
	160 $\pm$ 3%	$\approx$ 103	$\approx$ 230	RM6R-3B7-A160/N	RM6R-3B7-A160
	250 $\pm$ 3%	$\approx$ 161	$\approx$ 110	RM6R-3B7-A250/N	RM6R-3B7-A250
	315 $\pm$ 3%	$\approx$ 203	$\approx$ 90	RM6R-3B7-A315/N	RM6R-3B7-A315
	400 $\pm$ 3%	$\approx$ 258	$\approx$ 70	RM6R-3B7-A400/N	RM6R-3B7-A400
	2700 $\pm$ 25%	$\approx$ 1740	$\approx$ 0	–	RM6R-3B7

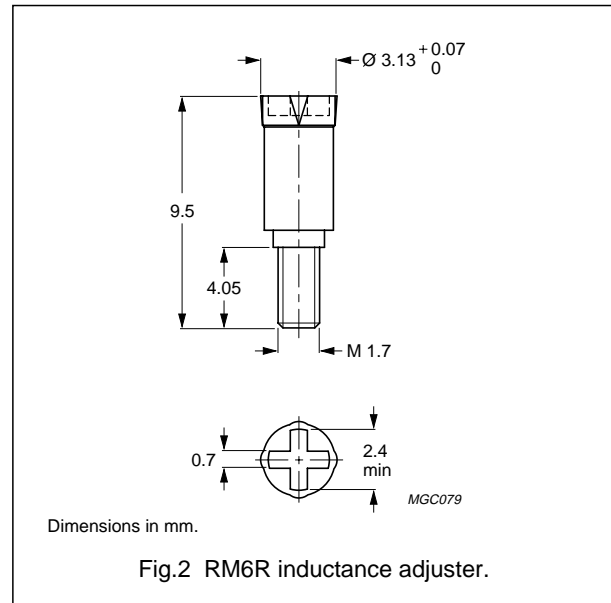
## RM cores and accessories

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## INDUCTANCE ADJUSTER

## General data

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



## Inductance adjuster selection chart

GRADE	$A_L$ (nH)	TYPES FOR LOW ADJUSTMENT	$\Delta L/L^{(1)}$ %	TYPES FOR MEDIUM ADJUSTMENT	$\Delta L/L^{(1)}$ %	TYPES FOR HIGH ADJUSTMENT	$\Delta L/L^{(1)}$ %
3H1; 3H3; 3B7	40	–	–	–	–	ADJ-RM6-GREEN	20
	63	–	–	ADJ-RM6-GREEN	14	ADJ-RM6-RED	22
	100	ADJ-RM6-GREEN	10	ADJ-RM6-RED	16	–	–
	160	ADJ-RM6-GREEN	6	ADJ-RM6-RED	10	ADJ-RM6-WHITE	19
	200	ADJ-RM6-RED	8	ADJ-RM6-WHITE	15	ADJ-RM6-VIOLET	18
	250	ADJ-RM6-WHITE	12	ADJ-RM6-VIOLET	14	ADJ-RM6-BROWN	20
	315	ADJ-RM6-WHITE	9	ADJ-RM6-BROWN	15	ADJ-RM6-BLACK	22
	400	ADJ-RM6-VIOLET	8	ADJ-RM6-BLACK	16	ADJ-RM6-GREY	30
	630	ADJ-RM6-BLACK	9	ADJ-RM6-GREY	15	–	–
	1000	ADJ-RM6-BLACK	5	ADJ-RM6-GREY	8	–	–
3D3	1250	–	–	ADJ-RM6-GREY	5	–	–
	40	–	–	–	–	ADJ-RM6-GREEN	20
	63	–	–	ADJ-RM6-GREEN	14	ADJ-RM6-RED	23
	100	ADJ-RM6-GREEN	9	ADJ-RM6-RED	16	ADJ-RM6-WHITE	28
4C6	160	ADJ-RM6-RED	10	ADJ-RM6-WHITE	17	–	–
	25	–	–	–	–	ADJ-RM6-GREEN	20
	40	–	–	ADJ-RM6-GREEN	14	ADJ-RM6-RED	20
	63	ADJ-RM6-GREEN	8	ADJ-RM6-RED	12	–	–

## Note

1. Maximum adjustment range.

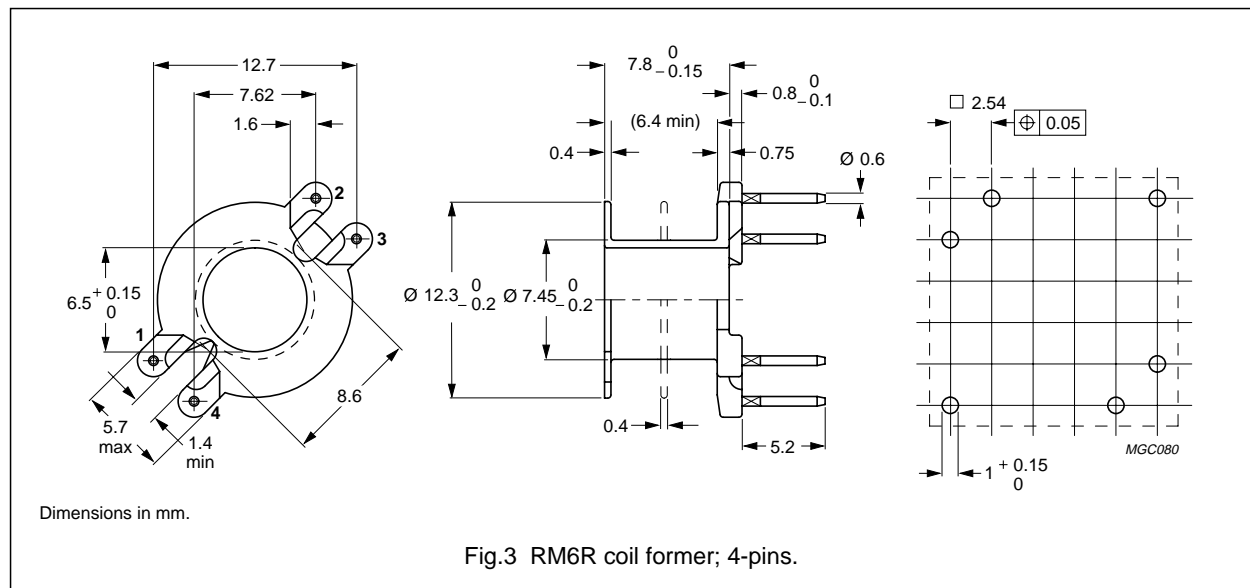
## RM cores and accessories

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## COIL FORMERS

## General data

PARAMETER	SPECIFICATION
Coil former material	phenolformaldehyde (PF), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E167521(M)
Pin material	copper-tin alloy (CuSn), tin-lead alloy (SnPb) 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

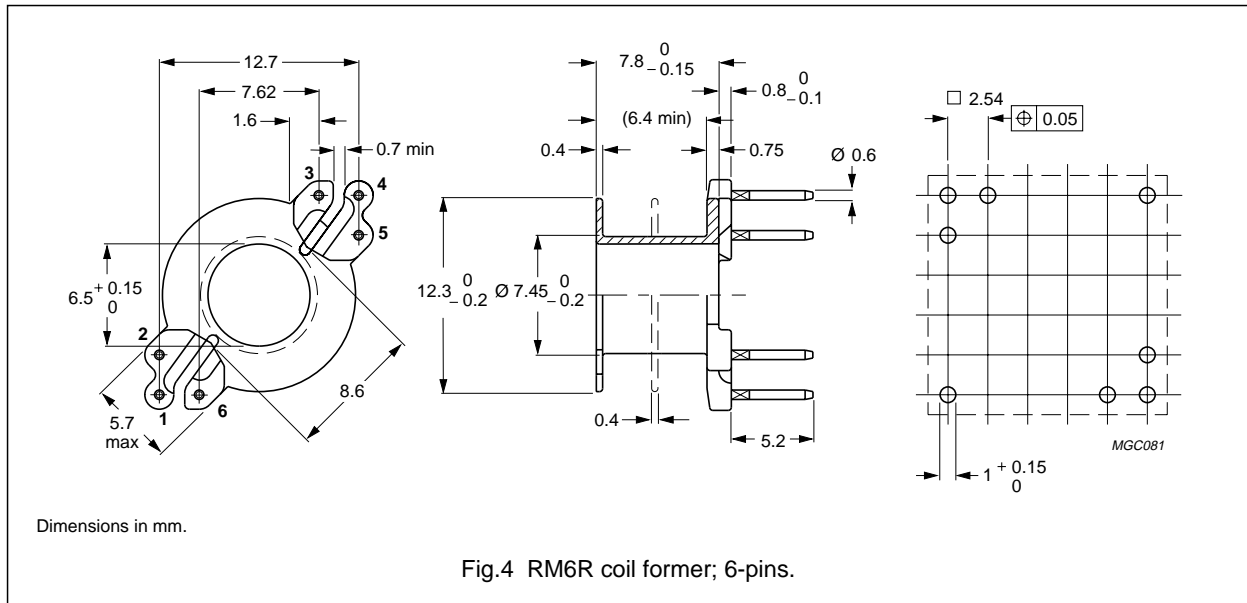


## Winding data for 4-pins RM6R coil former

NUMBER OF SECTIONS	NUMBER OF PINS	PIN POSITIONS USED	AVERAGE LENGTH OF TURN (mm)	WINDING AREA (mm <sup>2</sup> )	WINDING WIDTH (mm)	TYPE NUMBER
1	4	all	30	15	6.4	CSV-RM6S/R-1S-4P
2	4	all	30	2 × 7.0	2 × 3.0	CSV-RM6S/R-2S-4P

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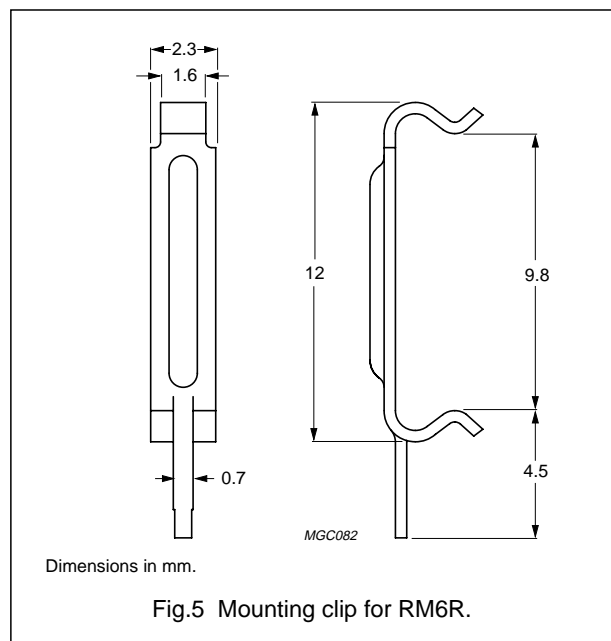
Winding data for 6-pins RM6R coil former

NUMBER OF SECTIONS	NUMBER OF PINS	PIN POSITIONS USED	AVERAGE LENGTH OF TURN (mm)	WINDING AREA (mm <sup>2</sup> )	WINDING WIDTH (mm)	TYPE NUMBER
1	6	all	30	15	6.4	CSV-RM6R-1S-6P
2	6	all	30	2 × 7.0	2 × 3.0	CSV-RM6R-2S-6P

MOUNTING PARTS

General data

ITEM	SPECIFICATION
Clamping force	≈20 N
Clip material	steel
Clip plating	silver (Ag)
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1
Type number	CLI/P-RM6



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**DEFINITIONS**

<b>Data sheet status</b>	
Objective specification	This data sheet contains target or goal specifications for product development.
Preliminary specification	This data sheet contains preliminary data; supplementary data may be published later.
Product specification	This data sheet contains final product specifications.
<b>Application information</b>	
Where application information is given, it is advisory and does not form part of the specification.	

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