

DATA SHEET

RM6S

RM cores and accessories

Product specification
Supersedes data of January 1999
File under Ferrite Ceramics, MA01

1999 Dec 23

RM cores and accessories

RM6S

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.863	mm ⁻¹
V_e	effective volume	840	mm ³
l_e	effective length	27.3	mm
A_e	effective area	31.0	mm ²
A_{min}	minimum area	23.8	mm ²
m	mass of set	≈4.5	g

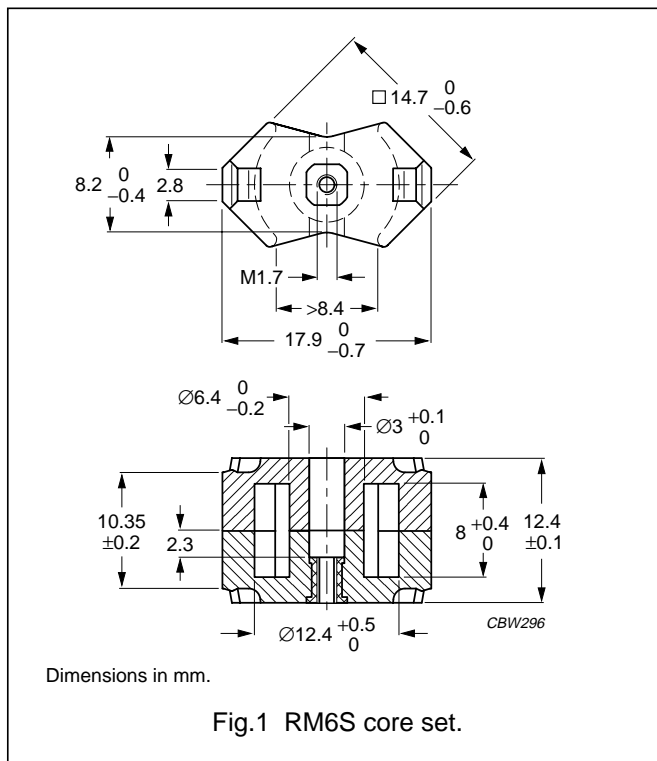


Fig.1 RM6S core set.

Core sets for filter applications

Clamping force for A_L measurements, 40 ±20 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μ m)	TYPE NUMBER (WITH NUT)	TYPE NUMBER (WITHOUT NUT)
3D3	63 ±3%	≈43	≈700	RM6S-3D3-E63/N	RM6S-3D3-E63
	100 ±3%	≈69	≈400	RM6S-3D3-E100/N	RM6S-3D3-E100
	160 ±3%	≈110	≈200	RM6S-3D3-A160/N	RM6S-3D3-A160
	950 ±25%	≈650	≈0	—	RM6S-3D3
3H3	160 ±3%	≈110	≈230	RM6S-3H3-A160/N	RM6S-3H3-A160
	250 ±3%	≈171	≈110	RM6S-3H3-A250/N	RM6S-3H3-A250
	315 ±3%	≈216	≈90	RM6S-3H3-A315/N	RM6S-3H3-A315
	400 ±3%	≈274	≈70	RM6S-3H3-A400/N	RM6S-3H3-A400
	2100 ±25%	≈1440	≈0	—	RM6S-3H3

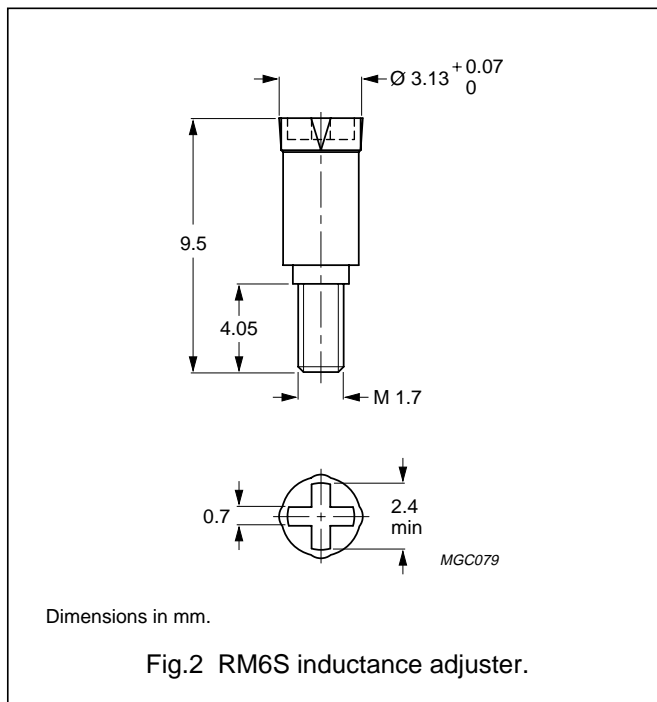
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INDUCTANCE ADJUSTERS

General data

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



Inductance adjuster selection chart

GRADE	A _L (nH)	TYPES FOR LOW ADJUSTMENT	ΔL/L ⁽¹⁾ %	TYPES FOR MEDIUM ADJUSTMENT	ΔL/L ⁽¹⁾ %	TYPES FOR HIGH ADJUSTMENT	ΔL/L ⁽¹⁾ %
3H3	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	11	ADJ-RM6-WHITE	19
	200	ADJ-RM6-RED	9	ADJ-RM6-WHITE	15	ADJ-RM6-VIOLET	19
	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	23
	400	ADJ-RM6-VIOLET	8	ADJ-RM6-BLACK	16	ADJ-RM6-GREY	26
	630	ADJ-RM6-BLACK	9	ADJ-RM6-GREY	15	–	–
	1000	ADJ-RM6-BLACK	5	ADJ-RM6-GREY	9	–	–
	1250	–	–	ADJ-RM6-GREY	5	–	–
3D3	40	–	–	–	–	ADJ-RM6-GREEN	19
	63	–	–	ADJ-RM6-GREEN	14	ADJ-RM6-RED	22
	100	ADJ-RM6-GREEN	9	ADJ-RM6-RED	15	ADJ-RM6-WHITE	27
	160	ADJ-RM6-RED	9	ADJ-RM6-WHITE	16	–	–

Note

1. Maximum adjustment range.

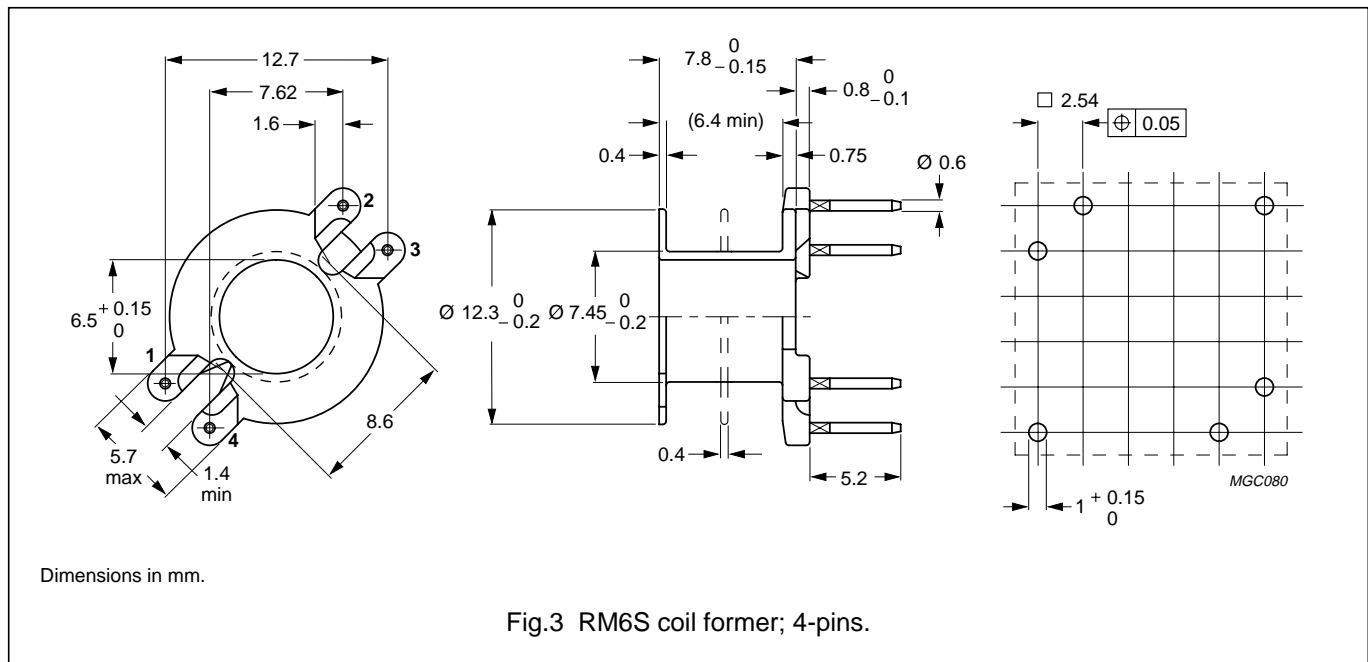
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COIL FORMERS

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 RM6S coil former

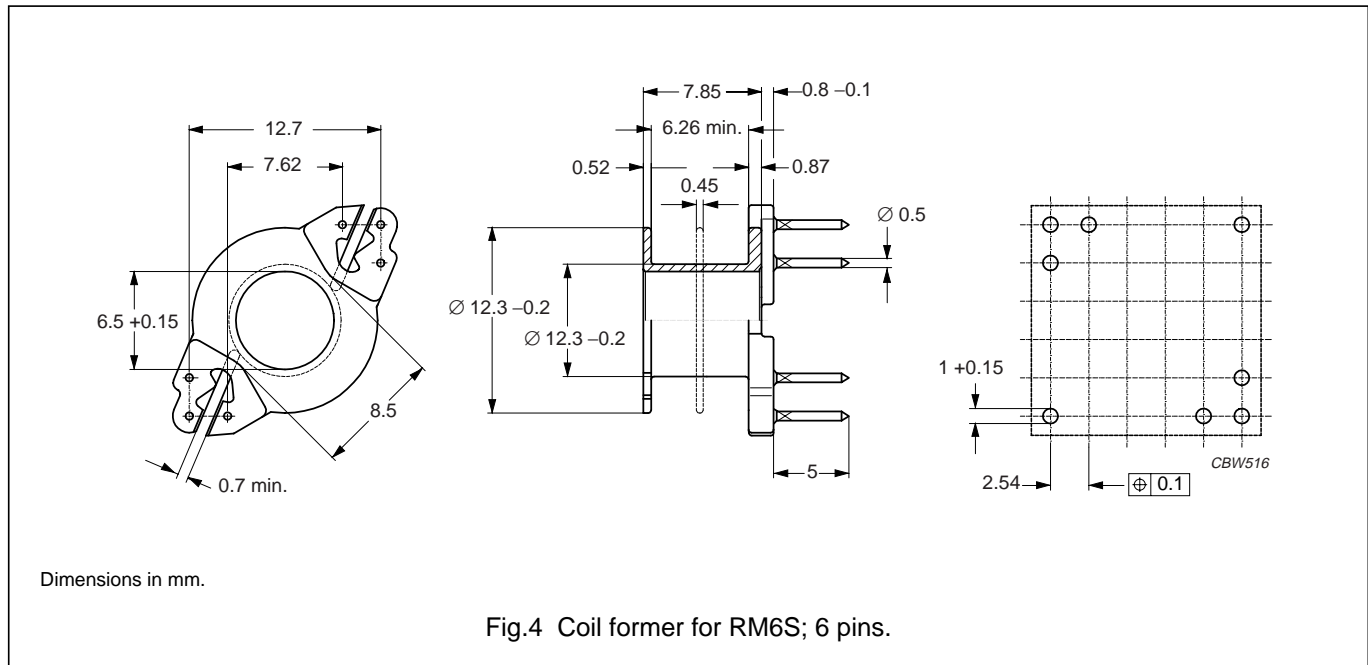
NUMBER OF SECTIONS	NUMBER OF PINS	PIN POSITIONS USED	WINDING AREA (mm ²)	WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	4	all	15	6.4	30	CSV-RM6S/R-1S-4P
2	4	all	2 × 7.0	2 × 3.0	30	CSV-RM6S/R-2S-4P

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General data

PARAMETER	SPECIFICATION
Coil former material	unsaturated polyester (UP), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E61040 (M)
Solder pad 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 RM6S coil former

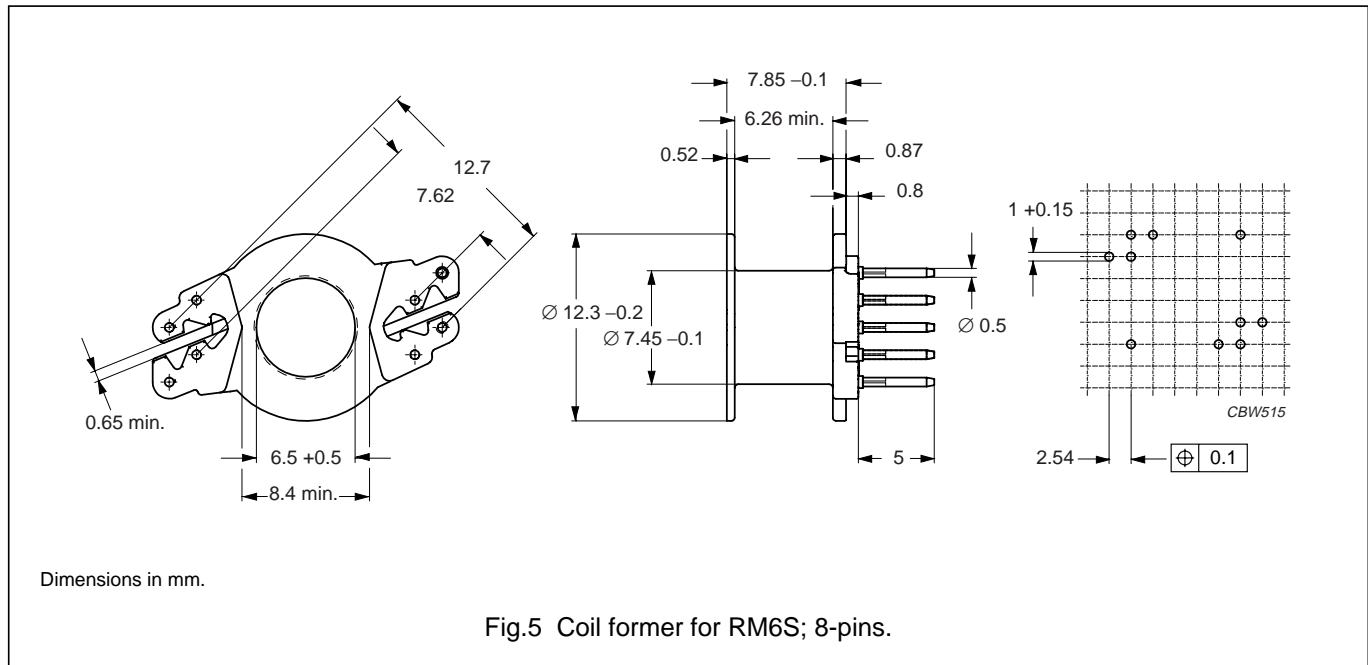
NUMBER OF SECTIONS	NUMBER OF PINS	WINDING AREA (mm ²)	WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	6	15.0	6.3	30.0	CSV-RM6S-1S-6P-G
2	6	2 × 7	2 × 3	30.0	CSV-RM6S-2S-6P-G

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General data

PARAMETER	SPECIFICATION
Coil former material	unsaturated polyester (UP), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E61040 (M)
Solder pad material	copper-clad steel, 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 RM6S coil former

NUMBER OF SECTIONS	NUMBER OF PINS	WINDING AREA (mm ²)	WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	8	14.5	6.26	30.7	CSV-RM6S-1S-8P

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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

