

DATA SHEET

RM6S

RM cores and accessories

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

1999 Dec 23

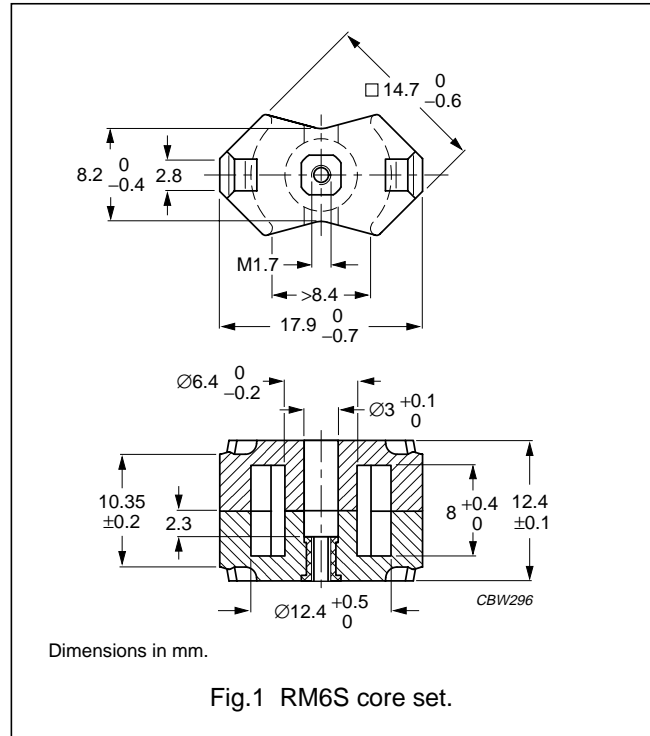
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CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	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



Core sets for filter applications

Clamping force for A_L measurements, 40 ±20 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	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

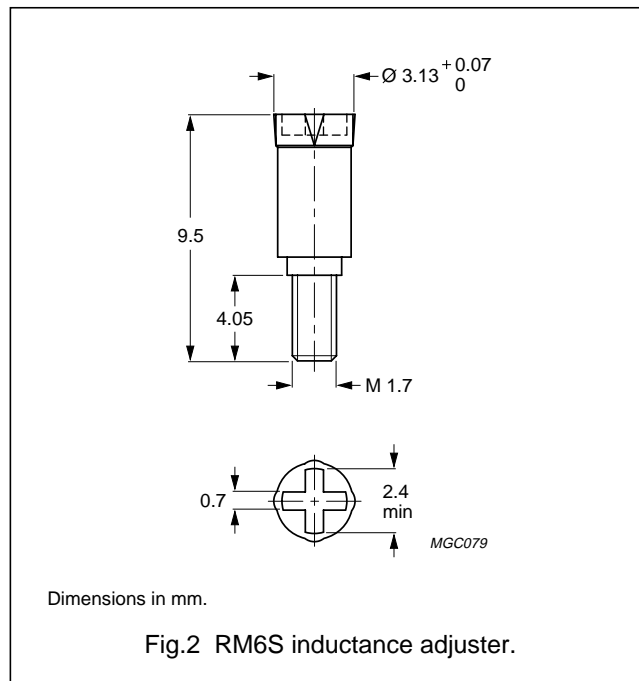
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INDUCTANCE ADJUSTERS

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	$\Delta L/L^{(1)}$ %	TYPES FOR MEDIUM ADJUSTMENT	$\Delta L/L^{(1)}$ %	TYPES FOR HIGH ADJUSTMENT	$\Delta L/L^{(1)}$ %
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	–	–
3D3	1250	–	–	ADJ-RM6-GREY	5	–	–
	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.

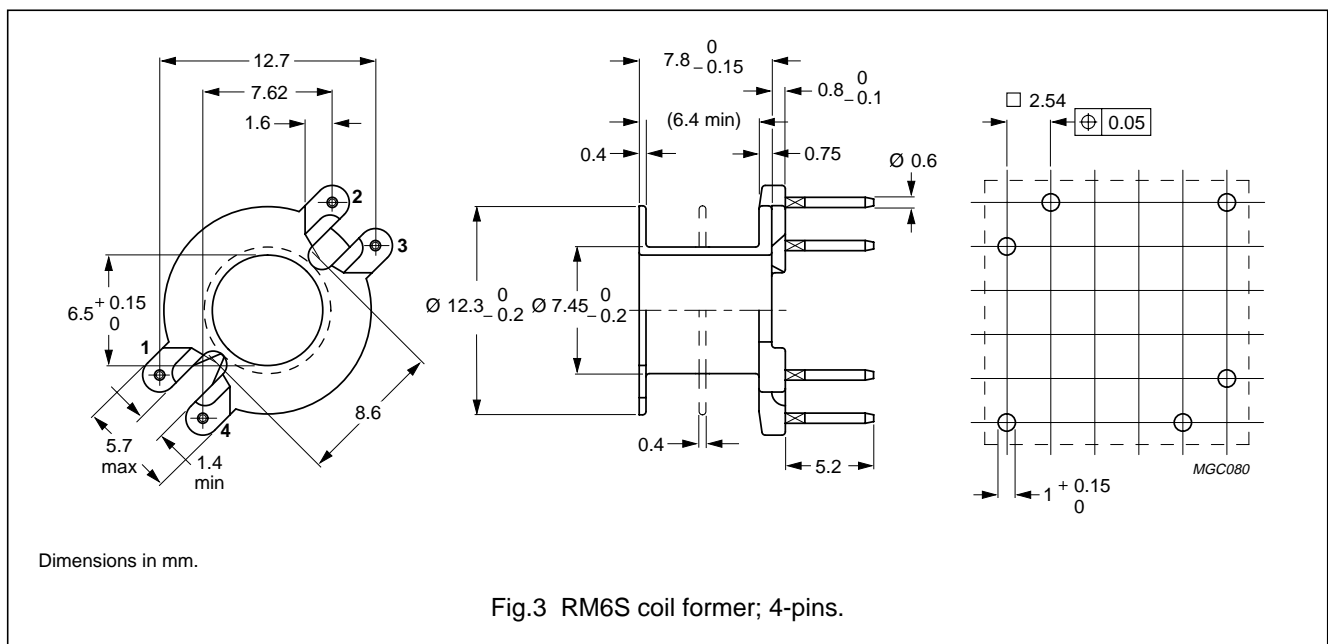
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COIL FORMERS

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

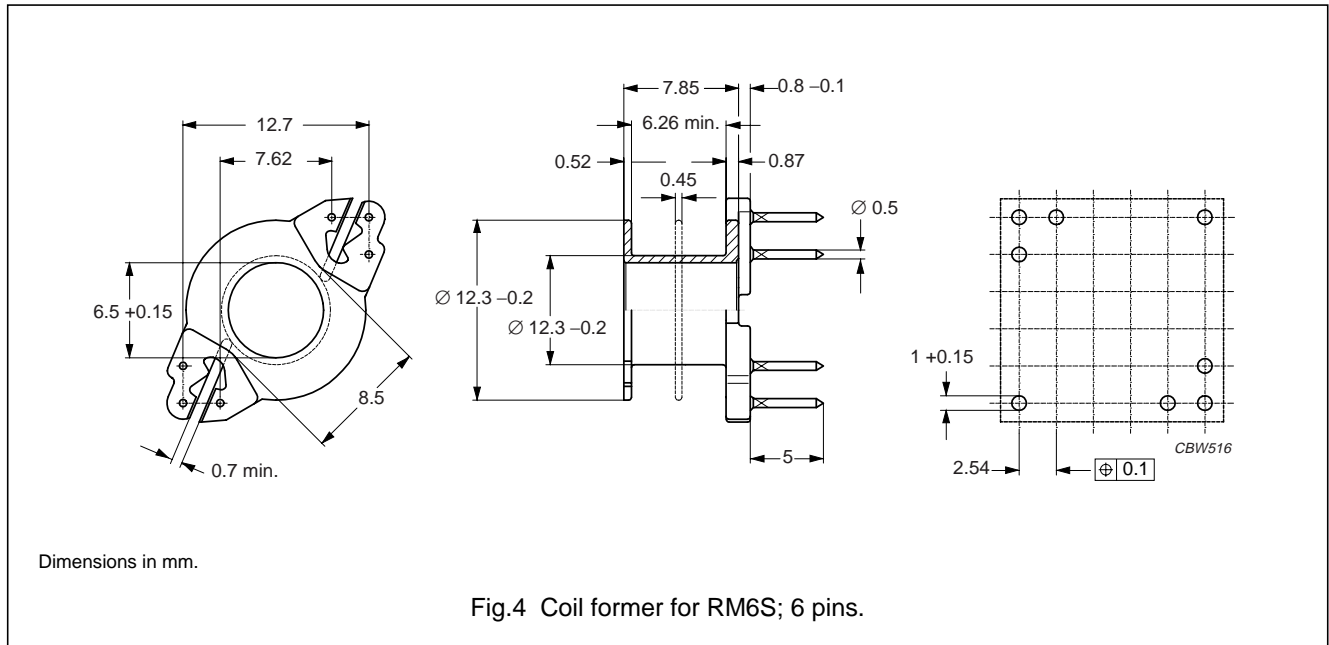
NUMBER OF SECTIONS	NUMBER OF PINS	PIN POSITIONS USED	WINDING AREA (mm ²)	WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	4	all	15	6.4	30	CSV-RM6S/R-1S-4P
2	4	all	2 × 7.0	2 × 3.0	30	CSV-RM6S/R-2S-4P

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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

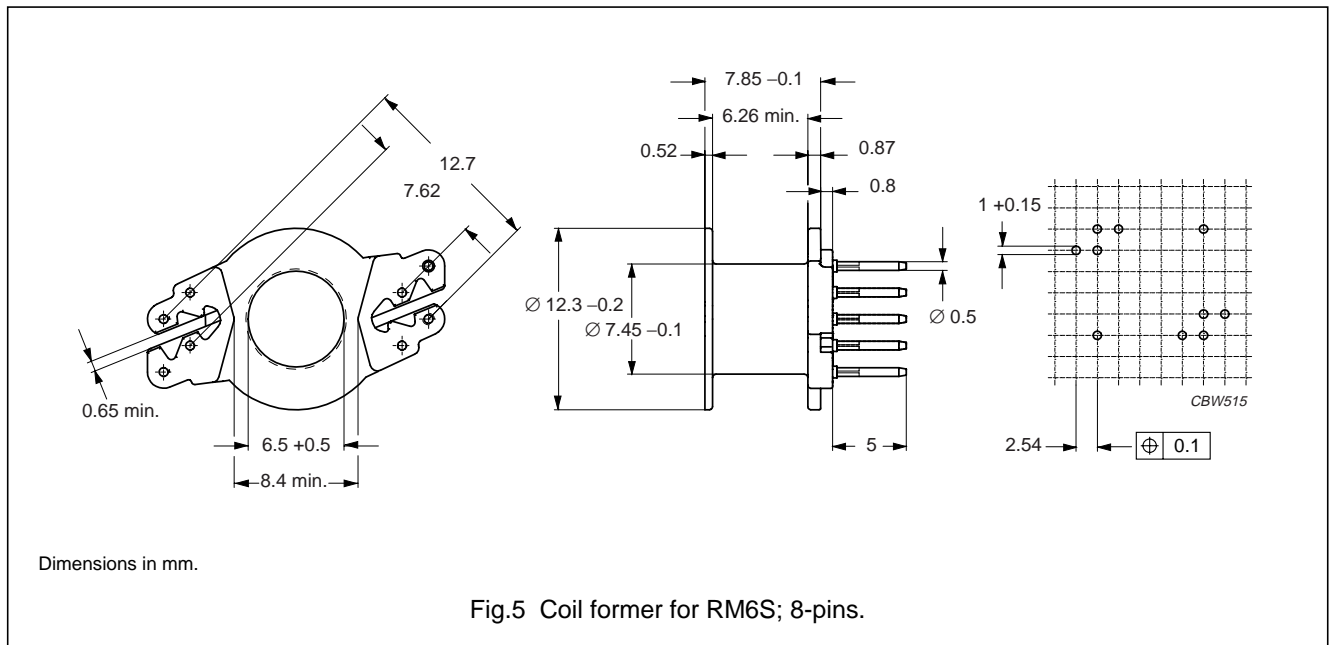
NUMBER OF SECTIONS	NUMBER OF PINS	WINDING AREA (mm ²)	WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	6	15.0	6.3	30.0	CSV-RM6S-1S-6P-G
2	6	2 × 7	2 × 3	30.0	CSV-RM6S-2S-6P-G

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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

