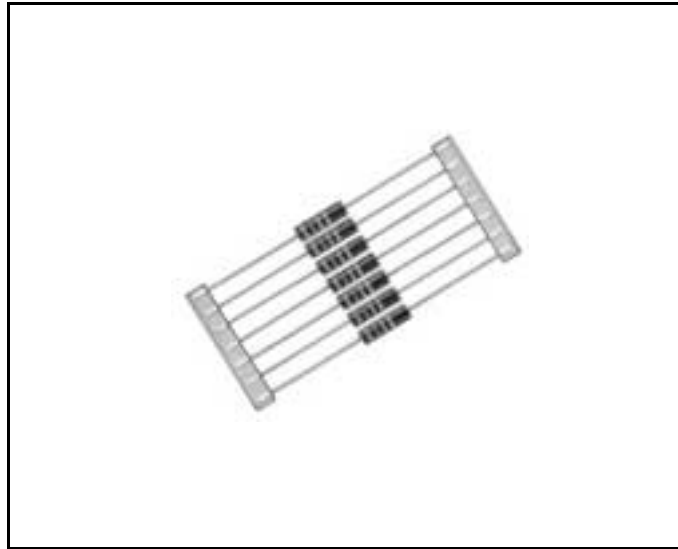


TYPE MSC15 SERIES

3rd February 2004
ISSUE 2

RF Inductor Moulded



TYPE MSC15 SERIES

The Sigma MSC15 is a fully moulded sister to the well known SC10 and SC15 series. The characteristics, Tolerance, Q, SRF and DC resistance mirror almost the SC10/SC15. The current carrying capacity is similar although the specification is slightly derated due to the higher measuring temperature. This fully moulded and colour banded construction provides excellent environmental protection at a surprisingly attractive price.

KEY FEATURES

- Fully Moulded Construction
- Colour Banded Coding
- Rugged Moulded Construction
- Wide Inductance R10 - 1000 μ H
- $\pm 5\%$ Selection Tolerance
- Attractively Priced
- Special Designs Welcome

STOCKISTS:

This product is not stocked in Distribution.

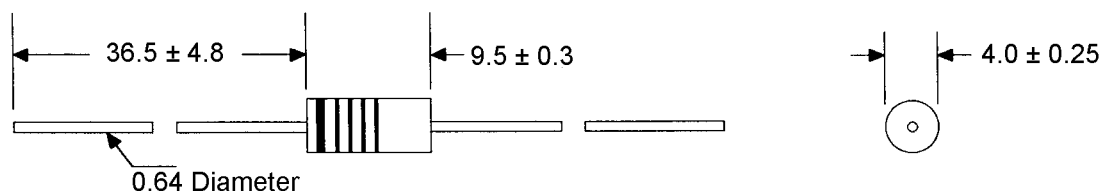
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ELECTRICAL

Construction:	Phenolic LT4 Grade1 Class B Powdered iron & ferrite LT10 Grade 1 Class A
Max. Operating Temperature:	Phenolic -55°C to +125°C Powdered Iron & ferrite -55°C to +105°C
Max. Temperature Rise:	Phenolic 35°C Powdered Iron & ferrite 15°C
Ambient Temperature:	90°C
Dielectric Withstand:	Sea Level 1000V. RMS
Lead Pull Strength:	2.27 kg
Inductance Value Range:	Phenolic 0.1µh - 1µh Powdered Iron 1.1µh - 27µh Ferrite 30µh - 1000 µh
Weight:	0.5g max.

DIMENSIONS



- Manufactured to meet BS9751 N0001 pattern A but released to commercial standard.
- Colour banded in accordance with MIL - C - 15305

All Dimensions are nominal
and in mm. unless otherwise
shown. Do Not Scale.

HOW TO ORDER

MSC15	220	K	R
COMMON PART	INDUCTANCE VALUE	TOLERANCE	PACK STYLE
MSC15 – Moulded Wound Inductor	See Table on Page 3	K – 10%	R – Reeled 1000

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Inductance Code	Inductance μ H	Q Min.	Test Freq. (L&Q) MHz	SRF (Min) MHz	DCR (Max) ohms	Rated DC Current mA at 90°C	35°C Rise
R15	0.15 $\pm$ 20%	50	25	525	0.03	2450	
R22	0.22 $\pm$ 20%	50	25	450	0.055	1900	
R33	0.33 $\pm$ 20%	45	25	360	0.09	1400	
R47	0.47 $\pm$ 20%	45	25	310	0.12	1225	
R56	0.56 $\pm$ 10%	50	25	280	0.135	1220	
R68	0.68 $\pm$ 10%	50	25	250	0.15	1100	
R82	0.82 $\pm$ 10%	50	25	220	0.22	900	
1R0	1.00 $\pm$ 10%	50	25	200	0.29	830	
1R2	1.20 $\pm$ 10%	33	7.9	180	0.42	650	
1R5	1.50 $\pm$ 10%	33	7.9	160	0.50	600	
1R8	1.80 $\pm$ 10%	33	7.9	150	0.65	525	
2R2	2.20 $\pm$ 10%	33	7.9	135	0.95	435	
2R7	2.70 $\pm$ 10%	33	7.9	120	1.20	385	
3R3	3.30 $\pm$ 10%	33	7.9	110	2.00	300	
3R9	3.90 $\pm$ 10%	33	7.9	100	2.30	280	
4R7	4.70 $\pm$ 10%	33	7.9	90	2.60	260	
5R6	5.60 $\pm$ 10%	45	7.9	60	0.32	495	750
6R8	6.80 $\pm$ 10%	50	7.9	55	0.50	395	600
8R2	8.20 $\pm$ 10%	50	7.9	50	0.60	360	545
100	10.00 $\pm$ 10%	55	7.9	45	0.90	290	445
120	12.00 $\pm$ 10%	65	2.5	42	1.10	265	404
150	15.00 $\pm$ 10%	65	2.5	40	1.40	240	370
180	18.00 $\pm$ 10%	75	2.5	34	2.25	185	280
220	22.00 $\pm$ 10%	75	2.5	30	2.50	175	265
270	27.00 $\pm$ 10%	60	2.5	25	2.60	170	260
330	33.00 $\pm$ 10%	65	2.5	19	3.00	165	250
360	36.00 $\pm$ 5%	60	2.5	15.5	2.50	180	
390	39.00 $\pm$ 5%	60	2.5	14.5	2.60	176	245
430	43.00 $\pm$ 5%	60	2.5	13.7	2.70	172	
470	47.00 $\pm$ 5%	55	2.5	13.0	2.75	170	240
510	51.00 $\pm$ 5%	55	2.5	12.7	2.85	167	
560	56.00 $\pm$ 5%	55	2.5	12.0	3.00	164	230
620	62.00 $\pm$ 5%	55	2.5	11.5	3.15	160	
680	68.00 $\pm$ 5%	55	2.5	11.0	3.30	156	220
750	75.00 $\pm$ 5%	55	2.5	10.5	3.70	147	
820	82.00 $\pm$ 5%	50	2.5	10.3	3.90	143	200
910	91.00 $\pm$ 5%	50	2.5	10.0	4.30	136	
101	100.0 $\pm$ 5%	50	2.5	9.5	4.50	133	185
111	110.0 $\pm$ 5%	60	0.79	8.9	4.90	128	
121	120.0 $\pm$ 5%	65	0.79	8.7	5.20	124	175
131	130.0 $\pm$ 5%	65	0.79	8.5	5.45	121	
151	150.0 $\pm$ 5%	65	0.79	8.0	6.05	114	165
161	160.0 $\pm$ 5%	65	0.79	7.5	6.40	111	
181	180.0 $\pm$ 5%	65	0.79	7.0	6.75	108	155
201	200.0 $\pm$ 5%	65	0.79	6.5	7.10	106	
221	220.0 $\pm$ 5%	65	0.79	6.2	7.45	103	145
241	240.0 $\pm$ 5%	65	0.79	5.9	7.80	101	
271	270.0 $\pm$ 5%	65	0.79	5.7	11.0	85	
301	300.0 $\pm$ 5%	65	0.79	5.4	11.5	83	
331	330.0 $\pm$ 5%	65	0.79	5.1	12.0	81	
361	360.0 $\pm$ 5%	65	0.79	4.8	12.5	80	
391	390.0 $\pm$ 5%	65	0.79	4.5	16.3	70	
431	430.0 $\pm$ 5%	65	0.79	4.2	17.1	68	
471	470.0 $\pm$ 5%	65	0.79	3.9	17.9	67	
511	510.0 $\pm$ 5%	65	0.79	3.8	18.8	65	
561	560.0 $\pm$ 5%	65	0.79	3.7	19.5	64	
621	620.0 $\pm$ 5%	65	0.79	3.3	25.9	55	
681	680.0 $\pm$ 5%	65	0.79	3.1	27.2	54	
751	750.0 $\pm$ 5%	65	0.79	2.9	28.6	53	
821	820.0 $\pm$ 5%	65	0.79	2.7	30.0	52	
911	910.0 $\pm$ 5%	65	0.79	2.5	31.5	50	
102	1000.0 $\pm$ 5%	65	0.79	2.3	33.0	49	