

RC/DS17

RADIO CONSTRUCTORS DATA SHEET

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INDUCTIVE REACTANCE—AUDIO FREQUENCIES

The Table gives reactance in ohms at the inductances and frequencies indicated. $X_L = 2\pi fL$. Use also in conjunction with Data Sheet No. 5 (published last month) as a rough guide for resonant circuits. Thus, 5H (3,140 Ω) and 0.5 μ F (3,180 Ω) will resonate near 100 c/s.

Inductance	25 c/s	50 c/s	100 c/s	400 c/s	500 c/s	1 kc/s	5 kc/s	10 kc/s
250H	39,300	78,500	157,000	628,000	785,000	1,570,000	7,850,000	15,700,000
100H	15,700	31,400	62,800	251,000	314,000	628,000	3,140,000	6,280,000
50H	7,850	15,700	31,400	126,000	157,000	314,000	1,570,000	3,140,000
25H	3,930	7,850	15,700	62,800	78,500	157,000	785,000	1,570,000
10H	1,570	3,140	6,280	25,100	31,400	62,800	314,000	628,000
5H	785	1,570	3,140	12,600	15,700	31,400	157,000	314,000
2.5H	393	785	1,570	6,280	7,850	15,700	78,500	157,000
1H	157	314	628	2,510	3,140	6,280	31,400	62,800
500mH	78.5	157	314	1,260	1,570	3,140	15,700	31,400
250mH	39.3	78.5	157	628	785	1,570	7,850	15,700
100mH	15.7	31.4	62.8	251	314	628	3,140	6,280
10mH	1.57	3.14	6.28	25.1	31.4	62.8	314	628
1mH	0.157	0.314	0.628	2.51	3.14	6.28	31.4	62.8
100 μ H	0.0157	0.0314	0.0628	0.251	0.314	0.628	3.14	6.28

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RADIO CONSTRUCTORS DATA SHEET

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INDUCTIVE REACTANCE—RADIO FREQUENCIES

The Table gives reactance in ohms at the inductances and frequencies indicated. $X_L = 2\pi fL$. Use also in conjunction with Data Sheet No. 6 (published last month) as a rough guide for resonant circuits. Thus, $500\mu\text{H}$ (3,140 Ω) and 50pF (3,180 Ω) will resonate near 1Mc/s.

Inductance	100 kc/s	300 kc/s	1 Mc/s	3 Mc/s	10 Mc/s	30 Mc/s	100 Mc/s	300 Mc/s
1H	628,000	1,880,000	6,280,000	18,800,000	62,800,000	18,800,000	12,600,000	18,800,000
100mH	62,800	188,000	628,000	1,880,000	6,280,000	18,800,000	12,600,000	18,800,000
50mH	31,400	94,200	314,000	942,000	3,140,000	9,420,000	6,280,000	9,420,000
20mH	12,600	37,700	126,000	377,000	1,260,000	3,770,000	2,510,000	3,770,000
10mH	6,280	18,800	62,800	188,000	628,000	1,880,000	1,260,000	1,880,000
5mH	3,140	9,420	31,400	94,200	314,000	942,000	628,000	942,000
2mH	1,260	3,770	12,600	37,700	126,000	377,000	251,000	377,000
1mH	628	1,880	6,280	18,800	62,800	188,000	126,000	188,000
$500\mu\text{H}$	314	942	3,140	9,420	31,400	94,200	62,800	94,200
$200\mu\text{H}$	126	377	1,260	3,770	12,600	37,700	25,100	37,700
$100\mu\text{H}$	62.8	188	628	1,880	6,280	18,800	12,600	18,800
$50\mu\text{H}$	31.4	94.2	314	942	3,140	9,420	6,280	9,420
$20\mu\text{H}$	12.6	37.7	126	377	1,260	3,770	2,510	3,770
$10\mu\text{H}$	6.28	18.8	62.8	188	628	1,880	1,260	1,880