

Resistive Pi Attenuator Table

The following table gives data for construction of resistive Pi type attenuators. It is taken from the RSGB published Microwave Handbook, Volume 2, page 10.6. In the table R1 refers to the shunt resistors to ground (2 off) while R2 refers to the series resistor.

Many of the values are not readily available within the standard E24 series – so if you decide not to use precision resistors, but to round the values to suit availability, then you should round both R1 and R2 values in the same direction – ie up or down, to preserve the correct ratio. However, this will result in the impedance being slightly away from the intended 50R.

dB	R1	R2
1	870	5.8
2	436	11.6
3	292	17.6
4	221	23.9
5	178	30.4
6	150	37.4
7	131	44.8
8	116	53
9	105	62
10	96	71
12	84	93
14	75	120
16	69	154
18	64	196
20	61	248
25	56	443
30	53	790

Table 1 – Pi Attenuator resistors