

The input and output impedance measured with the output or input, respectively, closed with with a resistor equal to the nominal impedance of the attenuator and expressed as a return loss against the nominal impedance better than 35 dB. The resistance measured between one input terminal and either output terminal of each balanced attenuator shall not differ from that measured between the other two terminals by more than 3% of whichever value is least.

The following table shows the nominal values for the attenuators. The figures for the tolerances of the resistors are calculated from the values of the insertion loss tolerances and the return loss given.

Att. dB	Resistors				Tol ± %
	R1	R4	R2	R3	
	ohms		ohms		
0.5	17.28		20850	20	
1.0	34.6		10440	10	
1.5	52.0		6950	6.7	
2.0	69.7		5235	10	
2.5	87.5		4198	7.6	
3.0	105.7		3509	6.6	
3.5	124.2		3019	5.8	
4.0	143.1		2652	5.0	
4.5	162.4		2368	4.6	
5.0	182.4		2142	4.2	
5.5	203.0		1958	3.8	
6.0	224.1		1806	3.4	
6.5	246.6		1678	3.2	
7.0	268.8		1569	3.0	
7.5	292.4		1475	2.8	

8.0	317.0		1394	2.7
8.5	342.7		1323	2.6
9.0	369.5		1260	2.5
9.5	397.5		1204	2.3
10.0	426.9		1155	2.2
10.5	457.5		1110	2.1
11.0	490.0		1071	2.0
11.5	523.8		1035	2.0
12.0	559.5		1003	1.9
12.5	597.0		973	1.9
13.0	636.5		946	1.8
13.5	678.2		921	1.8
14.0	722.0		899	2.1
14.5	768.2		878	2.1
15.0	817.0		859.6	2.1
16	922.5		826.0	1.9
17	1040.5		797.4	1.9
18	1172.5		772.9	1.8
19	1320.0		751.7	1.8
20	1458.0		733.3	1.7
21	1669.7		717.4	1.7
22	1876.5		703.6	1.6

The error in the insetion loss not greater than:

Nominal attenuator loss	Maximum error
0.5 dB to less than 2 dB	±0.1 dB
2 dB to less than 14 dB	±0.2 dB
14 dB to 22 dB	±0.25 dB

