

RELATION BETWEEN DB AND VOLTAGE OR CURRENT RATIO - GAINS

DB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.10	1.11
1	1.12	1.14	1.15	1.16	1.17	1.19	1.20	1.22	1.23	1.24
2	1.26	1.27	1.29	1.30	1.32	1.33	1.35	1.36	1.38	1.40
3	1.41	1.43	1.45	1.46	1.48	1.50	1.51	1.53	1.55	1.57
4	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76
5	1.78	1.80	1.82	1.84	1.86	1.88	1.91	1.93	1.95	1.97
6	2.00	2.02	2.04	2.07	2.09	2.11	2.14	2.16	2.19	2.21
7	2.24	2.26	2.29	2.32	2.34	2.37	2.40	2.43	2.45	2.48
8	2.51	2.54	2.57	2.60	2.63	2.66	2.69	2.72	2.75	2.79
9	2.82	2.85	2.88	2.92	2.95	2.99	3.02	3.05	3.09	3.13
10	3.16	3.20	3.24	3.27	3.31	3.35	3.39	3.43	3.47	3.51
11	3.55	3.59	3.63	3.67	3.72	3.76	3.80	3.85	3.89	3.94
12	3.98	4.03	4.07	4.12	4.17	4.22	4.27	4.32	4.37	4.42
13	4.47	4.52	4.57	4.62	4.68	4.73	4.79	4.84	4.90	4.95
14	5.01	5.07	5.13	5.19	5.25	5.31	5.37	5.43	5.50	5.56
15	5.62	5.69	5.75	5.82	5.89	5.96	6.03	6.10	6.17	6.24
16	6.31	6.38	6.46	6.53	6.61	6.68	6.76	6.84	6.92	7.00
17	7.08	7.16	7.24	7.33	7.41	7.50	7.59	7.67	7.76	7.85
18	7.94	8.04	8.13	8.22	8.32	8.41	8.51	8.61	8.71	8.81
19	8.91	9.02	9.12	9.23	9.33	9.44	9.55	9.66	9.77	9.89
20	10.0	10.1	10.2	10.4	10.5	10.6	10.7	10.8	11.0	11.1
21	11.2	11.4	11.5	11.6	11.7	11.9	12.0	12.2	12.3	12.4
22	12.6	12.7	12.9	13.0	13.2	13.3	13.5	13.6	13.8	14.0
23	14.1	14.3	14.5	14.6	14.8	15.0	15.1	15.3	15.5	15.7
24	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	17.6
25	17.8	18.0	18.2	18.4	18.6	18.8	19.1	19.3	19.5	19.7
26	20.0	20.2	20.4	20.7	20.9	21.1	21.4	21.6	21.9	22.1
27	22.4	22.6	22.9	23.2	23.4	23.7	24.0	24.3	24.5	24.8
28	25.1	25.4	25.7	26.0	26.3	26.6	26.9	27.2	27.5	27.9
29	28.2	28.5	28.8	29.2	29.5	29.9	30.2	30.5	30.9	31.3
30	31.6	32.0	32.4	32.7	33.1	33.5	33.9	34.3	34.7	35.1
31	35.5	35.9	36.3	36.7	37.2	37.6	38.0	38.5	38.9	39.4
32	39.8	40.3	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2
33	44.7	45.2	45.7	46.2	46.8	47.3	47.9	48.4	49.0	49.5
34	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	55.0	55.6
35	56.2	56.9	57.5	58.2	58.9	59.6	60.3	61.0	61.7	62.4
36	63.1	63.8	64.6	65.3	66.1	66.8	67.6	68.4	69.2	70.0
37	70.8	71.6	72.4	73.3	74.1	75.0	75.9	76.7	77.6	78.5
38	79.4	80.4	81.3	82.2	83.2	84.1	85.1	86.1	87.1	88.1
39	89.1	90.2	91.2	92.3	93.3	94.4	95.5	96.6	97.7	98.9
40	100	DB = 20 Log <sub>10</sub> Ratio (Voltage or Current)								
60	1 000									
80	10 000									
100	100 000									

RELATION BETWEEN DB AND VOLTAGE OR CURRENT RATIO - LOSSES

DB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	1.000	0.989	0.977	0.966	0.955	0.944	0.933	0.923	0.912	0.902
1	.891	.881	.871	.861	.851	.841	.832	.822	.813	.804
2	.794	.785	.776	.767	.759	.750	.741	.733	.724	.716
3	.708	.700	.692	.684	.676	.668	.661	.653	.646	.638
4	.631	.624	.617	.610	.603	.596	.589	.582	.575	.569
5	.562	.556	.550	.543	.537	.531	.525	.519	.513	.507
6	.501	.495	.490	.484	.479	.473	.468	.462	.457	.452
7	.447	.442	.437	.432	.427	.422	.417	.412	.407	.403
8	.398	.394	.389	.385	.380	.376	.372	.367	.363	.359
9	.355	.351	.347	.343	.339	.335	.331	.327	.324	.320
10	.316	.313	.309	.305	.302	.299	.295	.292	.288	.285
11	.282	.279	.275	.272	.269	.266	.263	.260	.257	.254
12	.251	.248	.245	.243	.240	.237	.234	.232	.229	.226
13	.224	.221	.219	.216	.214	.211	.209	.207	.204	.202
14	.200	.197	.195	.193	.191	.188	.186	.184	.182	.180
15	.178	.176	.174	.172	.170	.168	.166	.164	.162	.160
16	.158	.157	.155	.153	.151	.150	.148	.146	.145	.143
17	.141	.140	.138	.136	.135	.133	.132	.130	.129	.127
18	.126	.124	.123	.122	.120	.119	.117	.116	.115	.114
19	.112	.111	.110	.108	.107	.106	.105	.104	.102	.101
20	.100	.0989	.0977	.0966	.0955	.0944	.0933	.0923	.0912	.0902
21	.0891	.0881	.0871	.0861	.0851	.0841	.0832	.0822	.0813	.0804
22	.0794	.0785	.0776	.0767	.0759	.0750	.0741	.0733	.0724	.0716
23	.0708	.0700	.0692	.0684	.0676	.0668	.0661	.0653	.0646	.0638
24	.0631	.0624	.0617	.0610	.0603	.0596	.0589	.0582	.0575	.0569
25	.0562	.0556	.0550	.0543	.0537	.0531	.0525	.0519	.0513	.0507
26	.0501	.0495	.0490	.0484	.0479	.0473	.0468	.0462	.0457	.0452
27	.0447	.0442	.0437	.0432	.0427	.0422	.0417	.0412	.0407	.0403
28	.0398	.0394	.0389	.0385	.0380	.0376	.0372	.0367	.0363	.0359
29	.0355	.0351	.0347	.0343	.0339	.0335	.0331	.0327	.0324	.0320
30	.0316	.0313	.0309	.0305	.0302	.0299	.0295	.0292	.0288	.0285
31	.0282	.0279	.0275	.0272	.0269	.0266	.0263	.0260	.0257	.0254
32	.0251	.0248	.0245	.0243	.0240	.0237	.0234	.0232	.0229	.0226
33	.0224	.0221	.0219	.0216	.0214	.0211	.0209	.0207	.0204	.0202
34	.0200	.0197	.0195	.0193	.0191	.0188	.0186	.0184	.0182	.0180
35	.0178	.0176	.0174	.0172	.0170	.0168	.0166	.0164	.0162	.0160
36	.0158	.0157	.0155	.0153	.0151	.0150	.0148	.0146	.0145	.0143
37	.0141	.0140	.0138	.0136	.0135	.0133	.0132	.0130	.0129	.0127
38	.0126	.0124	.0123	.0122	.0120	.0119	.0117	.0116	.0115	.0114
39	.0112	.0111	.0110	.0108	.0107	.0106	.0105	.0104	.0102	.0101
40	.01	$DB = 20 \log_{10} \frac{1}{\text{Ratio}}$								
60	.001									
80	.0001									
100	.00001									