

# Technical Data

**Given: Decibels  
To Find: Power and Voltage Current Ratios**

**To Account for the Sign of the Decibel:**  
For positive (+) values of the decibel – Both voltage and power ratios are greater than unity. Use the two right-hand columns.

For negative (-) values of the decibel – Both voltage and power ratios are less than the unity. Use the two left-hand columns.

**Example –**  
Given:  $\neq 9.1$  dB Find:

dB	POWER RATIO	VOLTAGE RATIO
+ 9.1	8.128	2.851
- 9.1	0.1230	0.3508

TABLE 1

VOLTAGE RATIO	POWER RATIO	+ dB +		VOLTAGE RATIO	POWER RATIO	VOLTAGE RATIO	POWER RATIO	+ dB +		VOLTAGE RATIO	POWER RATIO
		dB	dB					dB	dB		
1.0000	1.0000	0.0	1.000	1.000	.5623	.3162	5.0	1.778	3.162		
.9886	.9772	0.1	1.012	1.023	.5559	.3090	5.1	1.799	3.236		
.9772	.9550	0.2	1.023	1.047	.5495	.3020	5.2	1.820	3.311		
.9661	.9333	0.3	1.035	1.072	.5433	.2951	5.3	1.841	3.388		
.9550	.9120	0.4	1.047	1.096	.5370	.2884	5.4	1.862	3.467		
.9441	.8913	0.5	1.059	1.122	.5309	.2818	5.5	1.884	3.548		
.9333	.8710	0.6	1.072	1.148	.5248	.2754	5.6	1.905	3.631		
.9226	.8511	0.7	1.084	1.175	.5188	.2692	5.7	1.928	3.715		
.9120	.8318	0.8	1.096	1.202	.5129	.2630	5.8	1.950	3.802		
.9016	.8128	0.9	1.109	1.230	.5070	.2570	5.9	1.972	3.890		
.8913	.7943	1.0	1.122	1.259	.5012	.2512	6.0	1.995	3.981		
.8810	.7762	1.1	1.135	1.288	.4955	.2455	6.1	2.018	4.074		
.8710	.7586	1.2	1.148	1.318	.4898	.2399	6.2	2.042	4.169		
.8610	.7413	1.3	1.161	1.349	.4842	.2344	6.3	2.065	4.266		
.8511	.7244	1.4	1.175	1.380	.4786	.2291	6.4	2.089	4.365		
.8414	.7079	1.5	1.189	1.413	.4732	.2239	6.5	2.113	4.467		
.8318	.6918	1.6	1.202	1.445	.4677	.2188	6.6	2.138	4.571		
.8222	.6761	1.7	1.216	1.479	.4624	.2138	6.7	2.163	4.677		
.8128	.6607	1.8	1.230	1.514	.4571	.2089	6.8	2.188	4.786		
.8035	.6457	1.9	1.245	1.549	.4519	.2042	6.9	2.213	4.898		
.7943	.6310	2.0	1.259	1.585	.4467	.1995	7.0	2.239	5.012		
.7852	.6166	2.1	1.274	1.622	.4416	.1950	7.1	2.265	5.129		
.7762	.6026	2.2	1.288	1.660	.4365	.1905	7.2	2.291	5.248		
.7674	.5888	2.3	1.303	1.698	.4315	.1862	7.3	2.317	5.370		
.7586	.5754	2.4	1.318	1.738	.4266	.1820	7.4	2.344	5.495		
.7499	.5623	2.5	1.334	1.778	.4217	.1778	7.5	2.371	5.623		
.7413	.5495	2.6	1.349	1.820	.4169	.1738	7.6	2.399	5.754		
.7328	.5370	2.7	1.365	1.862	.4121	.1698	7.7	2.427	5.888		
.7244	.5248	2.8	1.380	1.905	.4074	.1660	7.8	2.455	6.026		
.7161	.5129	2.9	1.396	1.950	.4027	.1622	7.9	2.483	6.166		
.7079	.5012	3.0	1.413	1.995	.3981	.1585	8.0	2.512	6.310		
.6998	.4898	3.1	1.429	2.042	.3936	.1549	8.1	2.541	6.457		
.6918	.4786	3.2	1.445	2.089	.3890	.1514	8.2	2.570	6.607		
.6839	.4677	3.3	1.462	2.138	.3846	.1479	8.3	2.600	6.761		
.6761	.4571	3.4	1.479	2.188	.3802	.1445	8.4	2.630	6.918		
.6683	.4467	3.5	1.496	2.239	.3758	.1413	8.5	2.661	7.079		
.6607	.4365	3.6	1.514	2.291	.3715	.1380	8.6	2.692	7.244		
.6531	.4266	3.7	1.531	2.344	.3673	.1349	8.7	2.723	7.413		
.6457	.4169	3.8	1.549	2.399	.3631	.1318	8.8	2.754	7.586		
.6383	.4074	3.9	1.567	2.455	.3589	.1288	8.9	2.786	7.762		
.6310	.3981	4.0	1.585	2.512	.3548	.1259	9.0	2.818	7.943		
.6237	.3890	4.1	1.603	2.570	.3508	.1230	9.1	2.851	8.128		
.6166	.3802	4.2	1.622	2.630	.3467	.1202	9.2	2.884	8.318		
.6095	.3715	4.3	1.641	2.692	.3428	.1175	9.3	2.917	8.511		
.6026	.3631	4.4	1.660	2.754	.3388	.1148	9.4	2.951	8.710		
.5957	.3548	4.5	1.679	2.818	.3350	.1122	9.5	2.985	8.913		
.5888	.3467	4.6	1.698	2.884	.3311	.1096	9.6	3.020	9.120		
.5821	.3388	4.7	1.718	2.951	.3273	.1072	9.7	3.055	9.333		
.5754	.3311	4.8	1.738	3.020	.3236	.1047	9.8	3.090	9.550		
.5689	.3236	4.9	1.758	3.090	.3199	.1023	9.9	3.126	9.772		

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