

PRIMARY CONSTANTS OF NONLOADED CABLE  
19 GAUGE ANB, DNB, GNB

Freq. kHz	Per Mile At 68° F.*			
	R Ohms	L mH	G μmhos	C μF
0	86.0	1.021	.066	.0665
.1	86.0	1.018	.099	.0662
.2	86.0	1.018	.156	.0662
.3	86.1	1.017	.226	.0661
.5	86.1	1.016	.398	.0661
1	86.2	1.015	.957	.0660
2	86.4	1.013	2.46	.0659
3	86.6	1.012	4.34	.0659
5	87.1	1.010	8.91	.0658
10	88.5	1.007	23.84	.0657
15	90.2	1.005	42.45	.0656
20	92.2	1.004	63.95	.0655

Through Carrier Frequencies

Freq. kHz	Per Mile At 55° F.*			
	R Ohms	L mH	G μmhos	C μF
0	83.6	1.020	.073	.0662
.1	83.6	1.018	.111	.0659
.2	83.6	1.017	.174	.0659
.5	83.7	1.016	.443	.0658
1	83.8	1.014	1.065	.0657
2	84.0	1.013	2.73	.0656
5	84.7	1.010	9.93	.0655
10	86.1	1.007	26.53	.0654
15	87.7	1.005	47.25	.0653
20	89.8	1.003	71.2	.0652
50	109	.988	202	.0650
100	137	.960	485	.0649
200	180	.923	1130	.0648
250	196	.903	1490	.0648
500	268	.852	3360	.0648
1000	379	.815	7140	.0648
2000	535	.785	14500	.0648
4000	756	.766	28800	.0648
5000	845	.763	35000	.0648
10000	1195	.750	62900	.0648

\* For Temperature Variations See Page 2.

## Estimated Average Temperature Variation \*

Freq. kHz	Per Mile Per Degree F.			
	R Ohms	L mH	G $\mu$ mhos	C $\mu$ F
0	.19	.000051	-.00057	.000023
.1	.19	.000051	-.00086	.000023
.2	.19	.000051	-.0014	.000023
.3	.19	.000051	-.0020	.000023
.5	.19	.000051	-.0035	.000023
1	.19	.000051	-.0083	.000023
2	.19	.000051	-.021	.000023
3	.19	.000051	-.038	.000023
5	.19	.000051	-.078	.000023
10	.19	.000051	-.21	.000023
15	.19	.000051	-.37	.000023
20	.19	.000051	-.56	.000023
50	.19	.000069	-1.61	.000025
100	.20	.000096	-3.27	.000026
200	.22	**	-5.88	.000028
250	.23		-6.85	.000029
500	.30		-9.41	.000032
1000	.42		**	.000036
2000	.59			.000043
4000	.84			**
5000	.94			
10000	1.33			

\* Average Values Between 34° and 76° F.

\*\* Effect of Temperature Variation at Higher Frequencies Is Uncertain.