

**PRIMARY CONSTANTS OF NON-LOADED CABLE (AT 68° F.)
24 GAUGE ASM, CSM**

Primary Distributed Constants — Per Mile		
L = .912 Millihenries		
C = .072 Microfarads		
Frequency Cycles/Sec.	R Ohms	G Micromhos
50	274.0	0.05
100	274.0	0.10
200	274.0	0.19
300	274.0	0.26
500	274.0	0.41
1000	274.0	1.0
2000	274.1	2.8
3000	274.2	5.1
5000	274.3	10.1
8000	274.6	19.5
10,000	274.9	26.5
15,000	275.9	43.0

**PRIMARY CONSTANTS OF NON-LOADED CABLE (AT 55° F.)
THROUGH CARRIER FREQUENCIES
24 GAUGE ASM, CSM**

Freq. Kc/Sec.	Per Mile				Resistance Temperature Coefficient A_R^{**}
	R* Ohms	L* Hen. $\times 10^{-3}$	G* Mhos $\times 10^{-6}$	C* Far. $\times 10^{-6}$	
0	265.5	.913	—	.0725	.0022
0.1	265.5	.913	0.10	.0723	.0022
0.2	265.5	.913	0.19	.0722	.0022
0.5	265.5	.913	0.41	.0721	.0022
1	265.5	.912	1.0	.0720	.0022
2	265.6	.910	2.8	.0719	.0022
5	265.8	.909	10.1	.0718	.0022
10	266.4	.908	26.5	.0717	.0022
15	267.4	.907	43	.0716	.0022
20	268.5	.906	66	.0715	.0022
50	272	.905	221	.0712	.0021
100	305	.900	529	.0710	.0020
200	375	.877	1,235	.0709	.0017
250	403	.865	1,600	.0709	.0015
500	535	.823	3,670	.0708	.0013
1,000	735	.776	7,800	.0708	.0011
2,000	1,015	.740	15,830	.0708	.0011
4,000	1,400	.715	31,400	.0708	.0011
5,000	1,555	.710	38,200	.0708	.0011
10,000	2,200	.692	68,700	.0708	.0011

* Estimates based on extrapolations of available data on primary constants of toll and experimental cables, and measurements of insertion loss and phase delay of exchange cable circuits.

** R_t (Resistance at temperature t) = $R_{55} [1 + A_R (t - 55)]$