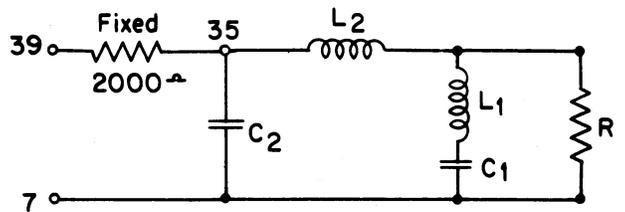


## NETWORK CONSTANTS FOR E-TYPE SERIES REPEATERS

	CONTENTS	PAGE
1. GENERAL	. . . . .	1
1. GENERAL		
1.01	This section is issued to make available in summary form the constants of the network in the E-type series repeaters, resulting from the strapping arrangements given in other sections of these practices for various loaded facilities and desired gains.	
1.02	The values given are for the resulting R, L <sub>1</sub> , L <sub>2</sub> , C <sub>1</sub> , and C <sub>2</sub> of the repeater network	

when strapped. The values given for C<sub>2</sub> are for the 0.5-section termination, and other end section values are proportional in capacitance to this value of C<sub>2</sub>.

1.03 The equivalent X-type network for loaded facilities to which these values apply is shown below.



## NETWORK CONSTANTS FOR E TYPE

## SERIES REPEATERS

Strapping Chart No. and Facility		Gain db	Network Constants				
No.	Facility		K	L <sub>1</sub>	L <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>
1X	19CNB-B88 22BSA-B88	1.5	3900	.0938	.20	.0045	.0090
		2.0	5410	.15	.25	.003	.0065
		2.5	6410	.15	.30	.0025	.005
		3.0	8200	.20	.3558	.002	.004
		3.5	8710	.20	.40	.002	.004
		4.0	10200	.25	.45	.002	.0035
		4.5	10710	.25	.4994	.0015	.003
		5.0	11200	.25	.525	.0015	.00276
		5.5	13100	.30	.60	.0015	.00293
		6.0	13610	.30	.695	.0015	.00308
		6.5	14610	.30	.6949	.0015	.00277
		7.0	15610	.30	.70	.001	.00218
		7.5	16000	.45	.75	.001	.00218
8.0	17000	.45	.75	.001	.002		
2X	19DNB-B88 24ASM-B88	1.5	4410	.094	.20	.004	.0075
		2.0	5900	.15	.25	.003	.006
		2.5	7410	.15	.30	.002	.0035
		3.0	9200	.15	.352	.002	.0035
		3.5	10200	.20	.40	.0015	.003
		4.0	11200	.25	.45	.0015	.003
		4.5	12100	.25	.50	.001	.00253
		5.0	13100	.25	.50	.001	.0022
		5.5	14610	.25	.60	.001	.00218
		6.0	15610	.30	.60	.001	.002
		6.5	16510	.30	.60	.001	.002
		7.0	17510	.30	.70	.001	.002
		7.5	18510	.30	.70	.001	.00178
8.0	19510	.30	.70	.0008	.0015		
3X	19CNB-D88	1.0					
		1.5	3259	.12	.20	.006	.0125
		2.0	4410	.1339	.25	.005	.0090
		2.5	5410	.15	.3522	.0045	.0090
		3.0	6410	.20	.40	.004	.0075
		3.5	7410	.25	.45	.003	.006
		4.0	8200	.25	.50	.003	.005
		4.5	9060	.25	.60	.003	.0055
		5.0	9710	.30	.60	.0025	.00487
		5.5	10200	.30	.6949	.0025	.00487
		6.0	11200	.45	.6992	.002	.004
		6.5	11710	.45	.6992	.002	.0038
		7.0	12100	.45	.6992	.00178	.0035
7.5	12610	.45	.75	.0015	.00343		
8.0	13610	.45	.874	.00171	.0035		
4X	19DNB-D88	1.5	3900	.1125	.20	.005	.0095
		2.0	4900	.1339	.25	.004	.007
		2.5	5900	.15	.30	.003	.0055
		3.0	6900	.20	.3558	.003	.005
		3.5	8200	.20	.45	.003	.0055
		4.0	9200	.25	.45	.002	.004
		4.5	10047	.25	.524	.002	.0035
		5.0	11200	.30	.60	.002	.00381
		5.5	11700	.30	.60	.0015	.0032
		6.0	12100	.30	.60	.0015	.003
		6.5	13610	.30	.6949	.0015	.00286
		7.0	14100	.30	.7056	.0015	.00261
		7.5	14610	.30	.7143	.0015	.0024
8.0	15610	.30	.80	.0015	.00253		

## NETWORK CONSTANTS FOR E TYPE

## SERIES REPEATERS

Strapping Chart No. and Facility		Gain db	Network Constants				
No.	Facility		R	I <sub>1</sub>	I <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>
5X	19CNB-H88 22BSA-H88 24DSM-H88	1.5	2868	.12	.20	.009	.016
		2.0	3598	.15	.25	.007	.012
		2.5	4410	.15	.30	.005	.011
		3.0	5410	.2	.40	.005	.0095
		3.5	6410	.25	.45	.004	.0075
		4.0	6900	.25	.50	.004	.007
		4.5	7900	.25	.5244	.0035	.0063
		5.0	8700	.30	.60	.003	.0055
		5.5	8867	.30	.60	.003	.0055
		6.0	9710	.30	.70	.003	.005
		6.5	10047	.45	.7374	.0025	.005
		7.0	10710	.45	.75	.0024	.0045
		7.5	11200	.45	.80	.0025	.0044
		8.0	11710	.6	.825	.0020	.004
6X	19DNB-H88 24ASM-H88	1.5	3259	.094	.20	.007	.0125
		2.0	3900	.15	.25	.005	.0100
		2.5	4900	.15	.352	.005	.0100
		3.0	6410	.20	.40	.004	.0070
		3.5	6900	.253	.45	.003	.0065
		4.0	8200	.25	.50	.003	.0055
		4.5	8710	.25	.5244	.0025	.00487
		5.0	9710	.25	.60	.0025	.00436
		5.5	10200	.30	.60	.0025	.0040
		6.0	11200	.30	.70	.0025	.0044
		6.5	11700	.30	.70	.002	.0038
		7.0	12100	.45	.75	.002	.0038
		7.5	12610	.45	.75	.002	.00343
		8.0	13610	.45	.874	.002	.00343
7X	19DNB-H88	1.5	2404	.12	.20	.012	.021
		2.0	3259	.15	.25	.009	.015
		2.5	4410	.20	.3558	.0075	.014
		3.0	4910	.20	.40	.007	.012
		3.5	5900	.25	.45	.0055	.0010
		4.0	6410	.25	.50	.005	.008
		4.5	7203	.242	.60	.005	.009
		5.0	8200	.30	.60	.004	.0065
		5.5	8200	.25	.655	.3004	.00652
		6.0	9200	.30	.70	.0035	.006
		6.5	9402	.45	.7374	.0032	.006
		7.0	9710	.45	.75	.003	.00533
		7.5	10200	.45	.7994	.003	.00533
		8.0	10710	.45	.874	.003	.00576
8X	19CNB-B135 22BSA-B135	1.0	3431	.0938	.2	.006	.011
		1.5	4900	.15	.3	.004	.008
		2.0	6410	.2	.40	.003	.006
		2.5	8200	.25	.50	.003	.005
		3.0	9710	.25	.655	.003	.0055
		3.5	11200	.3	.6949	.002	.004
		4.0	12510	.30	.80	.002	.0035
		4.5	13610	.352	.874	.002	.0035
		5.0	15100	.45	.90	.0015	.00285
		5.5	15610	.45	.9606	.0015	.00277
		6.0	17510	.60	1.074	.00133	.0025
		6.5	18000	.45	1.124	.00133	.0025
7.0	19510	.874	1.1126	.001	.0022		

## NETWORK CONSTANTS FOR E TYPE

## SERIES REPEATERS

Strapping Chart No. and Facility		Gain db	Network Constants				
No.	Facility		R	L <sub>1</sub>	L <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>
9X	19DNB-B135	1.0	3900	.0938	.20	.005	.0085
		1.5	5900	.15	.352	.0045	.008
		2.0	7410	.25	.45	.003	.006
		2.5	9200	.25	.4994	.002	.004
		3.0	11200	.2419	.60	.002	.0035
		3.5	12600	.30	.699	.002	.0035
		4.0	14610	.352	.874	.002	.0035
		4.5	15100	.352	.874	.0015	.00277
		5.0	16510	.45	.90	.001	.0024
		5.5	18000	.45	.90	.001	.002
		6.0	19500	.60	1.017	.001	.002
10X	19CNB-D135 22BSA-D135	1.0	2643	.12	.20	.009	.017
		1.5	3900	.178	.30	.0065	.012
		2.0	5410	.20	.45	.006	.0105
		2.5	6900	.25	.524	.004	.0075
		3.0	7410	.35	.60	.0035	.007
		3.5	8710	.45	.737	.0035	.007
		4.0	10200	.45	.799	.003	.0055
		4.5	11200	.45	.874	.0025	.00487
		5.0	12100	.45	.9606	.0025	.00444
		5.5	13100	.60	1.017	.002	.004
		6.0	13610	.60	1.074	.002	.0038
		6.5	15100	.60	1.25	.00218	.0045
		7.0	15610	.60	1.25	.002	.0036
		7.5	16510	.60	1.32	.002	.00373
8.0	17000	.60	1.32	.002	.0032		
11X	19DNB-D135	1.0	3000	.12	.20	.007	.013
		1.5	4900	.15	.352	.006	.0105
		2.0	6410	.25	.45	.004	.0075
		2.5	7410	.20	.5463	.004	.007
		3.0	9200	.30	.60	.003	.005
		3.5	10200	.30	.7143	.003	.005
		4.0	11200	.45	.75	.002	.004
		4.5	12610	.45	.874	.002	.00381
		5.0	13610	.45	.90	.002	.00343
		5.5	14610	.60	1.017	.0015	.0032
		6.0	15610	.60	1.017	.0015	.00286
		6.5	16510	.60	1.25	.00171	.0035
		7.0	17510	.60	1.25	.0015	.00293
		7.5	18510	.60	1.32	.0015	.00286
8.0	19510	.60	1.32	.0015	.00261		
12X	19CNB-H135 22BSA-H135	1.5	3431	.15	.352	.0115	.021
		2.0	4410	.25	.45	.008	.016
		2.5	5410	.25	.5244	.006	.0115
		3.0	6900	.25	.6555	.006	.010
		3.5	8200	.30	.714	.005	.008
		4.0	8710	.45	.80	.004	.007
		4.5	9710	.45	.90	.0035	.00667
		5.0	10200	.45	.9606	.0035	.0063
		5.5	11200	.60	1.017	.003	.0055
		6.0	12100	.60	1.074	.003	.005
		6.5	13100	.60	1.25	.003	.0055
		7.0	13610	.60	1.25	.0025	.0045
		7.5	14100	.60	1.32	.0025	.00487
		8.0	14610	.60	1.32	.0025	.00444

## NETWORK CONSTANTS FOR E TYPE

## SERIES REPEATERS

Strapping Chart No. and Facility		Gain db	Network Constants				
No.	Facility		R	L <sub>1</sub>	L <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>
13X	19DNB-H135	1.0	2404	.15	.208	.01	.017
		1.5	3900	.15	.3522	.009	.0155
		2.0	5410	.25	.45	.006	.010
		2.5	6900	.297	.6	.006	.0105
		3.0	7410	.3	.6	.004	.0065
		3.5	8710	.3	.714	.004	.0060
		4.0	9710	.30	.80	.003	.0055
		4.5	10710	.45	.8836	.003	.00487
		5.0	11710	.45	.9606	.003	.00487
		5.5	12610	.60	1.017	.0025	.00436
		6.0	13610	.45	1.124	.0025	.00373
		6.5	14610	.6	1.25	.0025	.00444
		7.0	14610	.60	1.25	.002	.0035
		7.5	15610	.6	1.32	.002	.0036
		8.0	17000	.6	1.4	.002	.0033
		14X	19DNB-B175	1.0	4410	.15	.2571
1.5	6410			.20	.40	.003	.006
2.0	8710			.30	.60	.003	.006
2.5	10710			.25	.655	.002	.004
3.0	13100			.30	.80	.002	.0035
3.5	14610			.45	.90	.0015	.003
4.0	15610			.45	.96	.0015	.003
4.5	17510			.546	1.25	.0015	.003
5.0	19510			.60	1.25	.00133	.0025
5.5	20410			.60	1.324	.001	.00218
6.0	22410			.60	1.40	.001	.002
15X	19DNB-D175			1.0	3500	.15	.30
		1.5	5410	.20	.45	.006	.0105
		2.0	7410	.30	.60	.005	.009
		2.5	9200	.30	.714	.004	.0065
		3.0	10200	.45	.799	.003	.0055
		3.5	12100	.45	.9606	.003	.0055
		4.0	12610	.60	1.017	.002	.0045
		4.5	14100	.60	1.25	.0025	.00487
		5.0	15610	.60	1.25	.002	.00373
		5.5	17000	.60	1.32	.00178	.0035
		6.0	18000	.874	1.35	.0015	.003
		6.5	18510	.874	1.50	.0015	.0032
		7.0	20410	.874	1.62	.0015	.003
		7.5	20900	.874	1.62	.0015	.00286
		8.0	21900	.874	1.82	.0015	.00286
		16X	19DNB-H175	1.0	2868	.15	.257
1.5	4410			.20	.40	.007	.012
2.0	5900			.30	.60	.006	.012
2.5	7410			.30	.714	.005	.009
3.0	8710			.45	.799	.004	.007
3.5	10200			.45	.9606	.004	.007
4.0	11710			.60	1.074	.003	.0060
4.5	13100			.60	1.25	.003	.00576
5.0	14100			.60	1.25	.00267	.0045
5.5	15100			.60	1.32	.0025	.00436
6.0	15610			.60	1.40	.0025	.004
6.5	16510			.60	1.55	.0025	.00436
7.0	18000			.75	1.62	.00218	.004
7.5	18510			.874	1.62	.002	.0035
8.0	19510			.874	1.82	.002	.00381