

Digital Step Attenuator

DAT-31575A-PP+

Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V, TEMPERATURE=-45degC

FREQUENCY (MHz)	STEP ATTENUATION* AT TTL CONTROL STATE (dB)							
	000000 THRU LOSS	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	0.94	0.53	1.04	2.05	4.14	8.21	16.36	31.71
50	0.94	0.53	1.05	2.06	4.13	8.21	16.27	31.92
100	0.94	0.54	1.05	2.05	4.12	8.20	16.28	31.94
150	0.95	0.53	1.05	2.05	4.12	8.19	16.26	31.93
200	0.96	0.53	1.05	2.05	4.12	8.20	16.26	31.88
250	0.96	0.53	1.05	2.06	4.12	8.20	16.27	31.90
300	0.96	0.53	1.05	2.05	4.13	8.20	16.28	31.90
350	0.96	0.53	1.05	2.05	4.13	8.21	16.28	31.90
400	0.97	0.53	1.05	2.05	4.13	8.20	16.28	31.91
450	0.98	0.53	1.05	2.05	4.13	8.20	16.27	31.92
500	1.00	0.53	1.04	2.05	4.12	8.19	16.26	31.94
550	1.02	0.53	1.04	2.04	4.11	8.18	16.25	31.93
600	1.04	0.53	1.04	2.04	4.10	8.17	16.25	31.93
700	1.06	0.53	1.03	2.04	4.10	8.16	16.24	31.91
800	1.10	0.52	1.03	2.03	4.08	8.13	16.20	31.78
900	1.12	0.52	1.03	2.03	4.08	8.14	16.22	31.94
1000	1.14	0.52	1.03	2.03	4.08	8.14	16.25	32.13
1100	1.17	0.51	1.02	2.02	4.07	8.14	16.24	32.11
1200	1.17	0.52	1.02	2.02	4.07	8.13	16.21	31.83
1300	1.17	0.51	1.02	2.02	4.07	8.12	16.15	31.22
1400	1.18	0.51	1.02	2.02	4.06	8.11	16.10	30.91
1500	1.21	0.51	1.02	2.02	4.07	8.14	16.18	31.47
1600	1.27	0.51	1.03	2.03	4.09	8.16	16.26	31.85
1700	1.29	0.51	1.03	2.03	4.10	8.17	16.26	31.65
1800	1.29	0.51	1.02	2.02	4.09	8.15	16.17	30.90
1900	1.28	0.51	1.02	2.02	4.10	8.16	16.15	30.67
2000	1.26	0.51	1.02	2.02	4.11	8.17	16.13	30.46
2100	1.23	0.51	1.03	2.03	4.13	8.19	16.11	30.15
2200	1.24	0.51	1.03	2.04	4.14	8.21	16.11	29.98
2300	1.27	0.51	1.04	2.05	4.17	8.28	16.22	30.61
2400	1.38	0.52	1.04	2.06	4.19	8.33	16.34	31.04
2500	1.43	0.52	1.04	2.05	4.18	8.32	16.24	30.36
2600	1.37	0.52	1.05	2.07	4.23	8.38	16.26	30.21
2700	1.25	0.52	1.06	2.09	4.30	8.46	16.32	30.03
2800	1.32	0.51	1.06	2.10	4.35	8.54	16.52	30.81
2900	1.67	0.50	1.04	2.07	4.34	8.56	16.74	32.05
3000	2.18	0.47	1.00	2.01	4.28	8.54	17.06	35.59

* Step Attenuation above Thru Loss (TTL Logic 000000).



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Digital Step Attenuator

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Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V, TEMPERATURE=-45degC

FREQUENCY (MHz)	INPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	20.27	21.72	22.99	24.58	36.55	28.90	24.68	23.22
50	19.95	21.44	22.64	24.26	38.02	29.48	25.18	23.56
100	19.98	21.44	22.58	24.15	37.33	29.78	25.46	23.81
150	19.79	21.19	22.26	23.73	38.80	30.85	26.22	24.50
200	19.78	21.17	22.24	23.69	39.57	31.04	26.34	24.57
250	19.61	20.99	22.07	23.55	41.31	31.42	26.53	24.68
300	19.63	21.06	22.19	23.71	38.60	30.49	25.95	24.23
350	19.56	20.96	22.09	23.63	36.68	30.05	25.75	24.10
400	19.58	20.97	22.08	23.65	33.29	28.94	25.28	23.73
450	19.46	20.84	21.92	23.39	32.08	28.77	25.39	23.88
500	19.42	20.75	21.78	23.15	30.50	28.25	25.32	23.89
550	19.36	20.67	21.66	22.98	30.41	28.58	25.74	24.28
600	19.33	20.59	21.55	22.77	29.65	28.34	25.86	24.45
700	19.43	20.64	21.54	22.67	29.23	28.24	26.09	24.76
800	19.34	20.48	21.34	22.35	28.24	27.60	25.97	24.82
900	19.04	20.16	20.96	21.88	27.21	26.75	25.58	24.63
1000	18.58	19.64	20.42	21.30	26.45	26.22	25.47	24.69
1100	18.13	19.15	19.87	20.67	25.90	26.10	25.92	25.32
1200	17.76	18.73	19.42	20.16	25.67	26.28	26.75	26.50
1300	17.37	18.29	18.96	19.64	25.79	26.94	28.40	28.64
1400	16.89	17.75	18.41	19.07	25.54	27.23	30.04	31.39
1500	16.71	17.57	18.21	18.88	25.89	28.38	32.99	36.12
1600	16.86	17.71	18.36	19.04	26.87	30.62	40.45	46.44
1700	17.73	18.57	19.21	19.83	28.13	31.79	33.03	30.61
1800	19.11	19.82	20.41	20.89	27.04	28.10	26.44	24.78
1900	20.27	20.76	21.16	21.50	24.08	24.29	22.82	21.57
2000	20.92	21.04	21.22	21.51	21.40	21.41	20.18	19.18
2100	21.01	20.78	20.76	20.98	19.24	19.15	18.14	17.28
2200	20.75	20.38	20.25	20.42	18.02	17.78	16.85	16.13
2300	23.19	22.52	22.16	22.12	18.19	17.51	16.48	15.77
2400	27.07	25.04	23.69	22.59	17.28	16.12	15.11	14.52
2500	26.58	24.28	22.49	20.84	15.87	14.50	13.60	13.14
2600	22.77	21.61	20.39	18.85	14.67	13.24	12.42	12.07
2700	19.11	19.01	18.47	17.47	14.00	12.55	11.78	11.47
2800	15.19	15.66	15.75	15.53	13.38	12.11	11.45	11.19
2900	12.35	12.93	13.30	13.58	12.69	11.83	11.36	11.16
3000	10.45	11.05	11.52	12.06	12.14	11.78	11.60	11.49



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Typical Performance Data

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FREQUENCY (MHz)	OUTPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	20.05	21.73	22.44	24.36	28.47	29.16	24.78	23.18
50	19.84	21.45	22.13	24.12	27.74	30.06	25.23	23.62
100	19.61	21.19	21.83	23.70	27.11	30.65	25.65	23.99
150	19.32	20.83	21.43	23.17	26.28	32.23	26.62	24.77
200	19.39	20.91	21.53	23.31	26.49	32.12	26.53	24.68
250	19.44	20.96	21.58	23.38	26.66	32.08	26.43	24.61
300	19.51	21.09	21.73	23.62	27.07	30.71	25.76	24.04
350	19.30	20.89	21.54	23.41	26.76	30.39	25.65	23.99
400	19.05	20.56	21.21	23.05	26.04	29.59	25.44	23.88
450	18.73	20.17	20.76	22.49	25.21	29.77	25.87	24.26
500	18.40	19.79	20.35	21.97	24.36	29.36	26.09	24.57
550	18.28	19.63	20.17	21.73	23.96	29.66	26.64	25.04
600	18.23	19.55	20.06	21.56	23.62	29.39	26.81	25.28
700	18.36	19.68	20.14	21.60	23.49	29.76	27.39	25.78
800	18.77	20.11	20.55	22.03	23.76	29.94	27.57	25.94
900	19.36	20.75	21.16	22.62	24.14	29.08	26.93	25.44
1000	19.54	20.87	21.24	22.59	23.67	27.84	26.36	25.11
1100	19.24	20.49	20.79	21.94	22.65	26.80	26.16	25.22
1200	19.35	20.58	20.80	21.90	22.39	26.60	26.31	25.51
1300	19.64	20.89	21.06	22.09	22.39	26.81	26.67	25.97
1400	19.63	20.84	20.96	21.93	22.11	27.08	27.34	26.86
1500	19.23	20.39	20.47	21.37	21.58	27.79	28.94	28.86
1600	18.30	19.30	19.37	20.14	20.49	27.62	30.75	32.69
1700	17.49	18.41	18.50	19.23	19.67	26.82	30.75	34.90
1800	17.18	18.07	18.22	18.99	19.79	28.02	33.67	41.27
1900	17.21	18.06	18.32	19.19	20.54	29.86	34.33	33.24
2000	17.42	18.23	18.62	19.61	21.84	29.56	28.74	26.60
2100	17.58	18.36	18.87	19.93	23.15	26.06	24.13	22.57
2200	18.38	19.17	19.80	20.92	25.21	23.10	21.04	19.80
2300	20.64	21.55	22.36	23.38	28.57	20.73	18.72	17.69
2400	27.11	28.56	29.67	28.59	28.18	18.59	16.85	15.99
2500	40.31	31.33	29.48	25.58	22.09	16.46	15.18	14.51
2600	29.63	26.89	25.31	22.64	19.20	15.03	13.95	13.43
2700	23.12	23.86	22.87	21.40	17.51	14.22	13.14	12.69
2800	16.46	17.51	17.55	17.84	15.47	13.55	12.61	12.24
2900	12.59	13.49	13.78	14.57	13.60	13.06	12.46	12.18
3000	10.45	11.25	11.60	12.52	12.32	12.90	12.75	12.61



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Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V, TEMPERATURE=+25degC

FREQUENCY (MHz)	STEP ATTENUATION* AT TTL CONTROL STATE (dB)							
	000000 THRU LOSS	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	1.08	0.52	1.02	2.02	4.03	8.03	16.09	31.41
50	1.08	0.51	1.02	2.02	4.03	8.03	16.03	31.60
100	1.08	0.52	1.02	2.02	4.03	8.03	16.04	31.55
150	1.09	0.51	1.02	2.02	4.03	8.03	16.04	31.53
200	1.10	0.52	1.01	2.02	4.03	8.03	16.04	31.50
250	1.11	0.51	1.02	2.02	4.03	8.03	16.03	31.54
300	1.12	0.51	1.02	2.02	4.02	8.03	16.04	31.57
350	1.14	0.51	1.01	2.02	4.02	8.03	16.04	31.53
400	1.15	0.51	1.02	2.02	4.02	8.02	16.02	31.57
450	1.17	0.51	1.01	2.02	4.02	8.02	16.03	31.58
500	1.18	0.51	1.01	2.01	4.01	8.02	16.01	31.50
550	1.20	0.51	1.01	2.01	4.01	8.00	16.01	31.55
600	1.22	0.51	1.01	2.01	4.01	8.00	16.01	31.55
700	1.25	0.51	1.00	2.01	4.00	8.00	16.00	31.55
800	1.28	0.50	1.00	2.00	4.00	7.99	15.98	31.39
900	1.31	0.50	1.00	2.00	3.99	7.99	16.01	31.64
1000	1.35	0.50	1.00	2.00	3.99	8.00	16.04	31.89
1100	1.37	0.50	1.00	2.00	3.99	8.00	16.04	31.77
1200	1.39	0.50	1.00	2.00	3.99	7.99	16.00	31.43
1300	1.41	0.50	1.00	2.00	3.98	7.97	15.94	30.91
1400	1.43	0.49	0.99	1.99	3.98	7.96	15.92	30.85
1500	1.46	0.49	1.00	2.00	3.99	8.00	15.99	31.26
1600	1.52	0.49	1.00	2.00	4.01	8.02	16.04	31.46
1700	1.54	0.49	1.00	2.00	4.02	8.03	16.06	31.25
1800	1.54	0.49	1.00	2.00	4.02	8.03	15.97	30.57
1900	1.54	0.49	1.00	2.00	4.03	8.04	15.98	30.49
2000	1.54	0.49	1.00	2.00	4.04	8.05	15.96	30.30
2100	1.55	0.49	1.00	2.00	4.05	8.06	15.94	30.03
2200	1.58	0.49	1.00	2.00	4.05	8.08	15.94	29.96
2300	1.61	0.49	1.00	2.00	4.06	8.12	16.04	30.54
2400	1.57	0.49	1.00	2.01	4.08	8.16	16.08	30.62
2500	1.40	0.49	1.00	2.01	4.10	8.17	16.00	29.92
2600	1.31	0.49	1.01	2.02	4.14	8.23	16.05	29.87
2700	1.30	0.49	1.01	2.02	4.17	8.26	16.07	29.76
2800	1.48	0.48	1.00	2.02	4.19	8.31	16.25	30.59
2900	1.85	0.46	0.98	1.99	4.18	8.33	16.47	32.14
3000	2.34	0.44	0.95	1.95	4.14	8.31	16.71	35.29

* Step Attenuation above Thru Loss (TTL Logic 000000).



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Typical Performance Data

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FREQUENCY (MHz)	INPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	19.01	19.92	20.54	21.19	32.11	37.76	46.88	37.04
50	18.92	19.82	20.43	21.09	31.44	36.72	50.43	37.48
100	18.83	19.73	20.33	21.02	31.25	36.37	47.65	37.42
150	18.76	19.65	20.24	20.90	30.54	35.08	45.21	38.26
200	18.64	19.51	20.11	20.78	30.06	34.17	42.69	38.37
250	18.56	19.43	20.00	20.66	29.54	33.16	41.13	39.16
300	18.49	19.34	19.92	20.55	29.06	32.47	39.42	39.01
350	18.43	19.26	19.82	20.44	28.63	31.70	38.48	39.84
400	18.44	19.25	19.81	20.40	28.41	31.27	37.56	39.37
450	18.48	19.30	19.85	20.43	28.35	31.09	37.53	40.57
500	18.56	19.36	19.91	20.47	28.32	30.91	37.19	40.68
550	18.61	19.43	19.96	20.51	28.33	30.90	37.31	42.15
600	18.69	19.49	20.03	20.53	28.31	30.73	36.96	41.55
700	18.83	19.62	20.16	20.63	28.29	30.48	36.20	40.45
800	18.77	19.54	20.07	20.52	27.65	29.34	33.82	37.05
900	18.57	19.32	19.84	20.27	26.72	28.03	31.49	33.78
1000	18.11	18.85	19.34	19.75	25.61	26.73	29.76	31.98
1100	17.46	18.15	18.64	19.01	24.42	25.40	28.31	30.88
1200	16.84	17.49	17.93	18.28	23.30	24.24	26.96	29.62
1300	16.35	16.93	17.35	17.64	22.38	23.23	25.66	28.11
1400	15.98	16.53	16.90	17.14	21.66	22.38	24.44	26.46
1500	16.01	16.53	16.88	17.07	21.60	22.28	24.08	25.74
1600	16.35	16.81	17.13	17.27	21.76	22.38	23.67	24.69
1700	17.07	17.46	17.72	17.78	21.88	22.36	22.84	23.07
1800	17.95	18.21	18.36	18.36	21.50	21.90	21.66	21.34
1900	18.69	18.77	18.82	18.82	20.65	21.08	20.45	19.83
2000	19.16	19.07	19.03	19.09	19.59	20.09	19.31	18.53
2100	19.30	19.08	18.97	19.16	18.49	18.99	18.19	17.39
2200	19.27	19.02	18.91	19.16	17.88	18.31	17.53	16.73
2300	21.05	20.69	20.48	20.77	18.37	18.56	17.59	16.74
2400	24.26	23.55	23.01	23.04	18.82	18.42	17.29	16.42
2500	32.75	29.14	26.89	25.35	18.53	17.37	16.26	15.55
2600	27.67	26.94	25.51	23.51	17.56	16.04	15.08	14.53
2700	20.47	20.97	20.98	20.21	16.57	14.98	14.19	13.78
2800	15.91	16.55	16.97	17.04	15.51	14.24	13.67	13.38
2900	12.98	13.61	14.15	14.59	14.50	13.74	13.48	13.30
3000	11.00	11.60	12.15	12.76	13.63	13.45	13.59	13.59



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FREQUENCY (MHz)	OUTPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	18.83	19.90	20.01	21.10	22.20	36.70	49.59	36.94
50	18.87	19.91	20.10	21.07	22.09	36.02	49.41	37.13
100	18.67	19.70	19.92	20.89	21.99	35.26	47.13	37.34
150	18.57	19.57	19.78	20.75	21.78	34.08	44.73	38.27
200	18.39	19.39	19.60	20.55	21.62	33.26	42.58	38.36
250	18.29	19.29	19.49	20.41	21.41	32.32	41.31	39.49
300	18.13	19.12	19.32	20.24	21.21	31.55	39.33	39.46
350	18.01	18.98	19.15	20.06	20.97	30.74	38.31	40.77
400	17.85	18.79	18.99	19.87	20.76	30.07	37.01	40.68
450	17.76	18.69	18.88	19.75	20.58	29.59	36.43	41.87
500	17.70	18.64	18.80	19.64	20.45	29.19	35.74	41.57
550	17.70	18.62	18.78	19.63	20.39	29.00	35.52	42.33
600	17.78	18.69	18.84	19.68	20.38	28.97	35.37	42.55
700	18.03	18.97	19.11	19.93	20.56	29.39	36.39	46.24
800	18.37	19.33	19.46	20.28	20.81	29.86	37.42	48.18
900	18.73	19.71	19.81	20.63	21.01	30.14	37.60	44.82
1000	18.84	19.83	19.89	20.68	20.85	29.29	35.44	40.22
1100	18.68	19.63	19.66	20.38	20.38	27.67	32.17	35.70
1200	18.54	19.44	19.43	20.08	19.89	26.39	30.13	33.33
1300	18.43	19.28	19.22	19.76	19.43	25.49	28.83	32.06
1400	18.30	19.10	18.95	19.39	18.93	24.64	27.49	30.52
1500	18.06	18.76	18.57	18.91	18.46	23.83	26.18	28.73
1600	17.35	17.94	17.76	18.03	17.69	22.47	24.26	26.04
1700	16.88	17.41	17.26	17.54	17.35	21.91	23.50	24.91
1800	16.62	17.12	17.02	17.37	17.46	21.99	23.36	24.36
1900	16.53	17.01	17.02	17.42	17.89	22.38	23.42	23.82
2000	16.65	17.11	17.24	17.74	18.78	22.94	23.37	23.02
2100	17.06	17.52	17.73	18.32	20.05	23.14	22.66	21.71
2200	18.45	18.89	19.19	19.79	22.43	23.15	21.69	20.49
2300	21.22	21.55	21.93	22.40	26.71	22.47	20.48	19.22
2400	26.08	25.84	26.47	26.25	33.37	21.04	19.15	18.00
2500	32.28	30.00	30.88	28.42	28.05	19.20	17.63	16.71
2600	36.88	43.17	36.94	29.97	23.57	17.90	16.48	15.73
2700	22.46	24.39	24.06	24.21	19.57	16.71	15.48	14.90
2800	16.44	17.59	17.75	18.62	16.40	15.60	14.76	14.33
2900	12.90	13.80	14.07	15.03	14.08	14.69	14.40	14.17
3000	10.84	11.61	11.91	12.88	12.57	14.20	14.50	14.51



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IF/RF MICROWAVE COMPONENTS

Digital Step Attenuator

DAT-31575A-PP+

Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V,,TEMPERATURE=+105degC

FREQUENCY (MHz)	STEP ATTENUATION* AT TTL CONTROL STATE (dB)							
	000000 THRU LOSS	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	1.26	0.49	0.99	2.00	3.94	7.88	15.76	31.16
50	1.25	0.50	0.99	2.00	3.94	7.87	15.81	31.17
100	1.25	0.50	0.99	2.00	3.94	7.88	15.81	31.17
150	1.26	0.50	1.00	2.00	3.95	7.89	15.82	31.12
200	1.27	0.50	0.99	2.00	3.95	7.88	15.82	31.14
250	1.29	0.50	0.99	2.00	3.94	7.88	15.80	31.15
300	1.32	0.50	0.99	2.00	3.94	7.88	15.80	31.12
350	1.35	0.49	0.99	1.99	3.93	7.87	15.78	31.14
400	1.38	0.49	0.99	1.99	3.93	7.87	15.79	31.15
450	1.40	0.49	0.99	1.99	3.93	7.86	15.78	31.17
500	1.42	0.49	0.98	1.99	3.93	7.86	15.78	31.14
550	1.43	0.49	0.99	1.99	3.93	7.86	15.79	31.10
600	1.45	0.49	0.99	1.99	3.93	7.86	15.79	31.16
700	1.47	0.49	0.99	1.99	3.93	7.87	15.79	31.13
800	1.51	0.49	0.98	1.99	3.93	7.86	15.79	31.14
900	1.54	0.49	0.98	1.99	3.93	7.88	15.82	31.31
1000	1.59	0.48	0.98	1.99	3.93	7.88	15.85	31.47
1100	1.63	0.48	0.98	1.99	3.93	7.88	15.85	31.36
1200	1.68	0.48	0.98	1.98	3.92	7.87	15.81	31.05
1300	1.71	0.48	0.98	1.98	3.92	7.85	15.74	30.62
1400	1.75	0.48	0.98	1.98	3.93	7.86	15.75	30.65
1500	1.81	0.47	0.98	1.99	3.94	7.89	15.83	31.09
1600	1.87	0.48	0.98	1.99	3.96	7.92	15.88	31.21
1700	1.89	0.47	0.98	1.99	3.96	7.93	15.87	30.89
1800	1.90	0.47	0.98	1.99	3.96	7.93	15.80	30.38
1900	1.88	0.47	0.98	1.99	3.97	7.95	15.83	30.36
2000	1.85	0.47	0.98	1.99	3.97	7.95	15.81	30.13
2100	1.80	0.47	0.97	1.98	3.97	7.97	15.80	29.96
2200	1.74	0.47	0.98	1.98	3.98	7.98	15.81	29.89
2300	1.65	0.47	0.98	1.98	4.00	8.03	15.90	30.46
2400	1.53	0.47	0.97	1.98	4.02	8.05	15.89	30.13
2500	1.41	0.46	0.97	1.97	4.02	8.03	15.77	29.27
2600	1.42	0.46	0.96	1.97	4.03	8.05	15.79	29.46
2700	1.49	0.45	0.96	1.96	4.04	8.07	15.80	29.54
2800	1.71	0.44	0.95	1.95	4.04	8.09	15.93	30.20
2900	2.09	0.43	0.93	1.93	4.04	8.11	16.13	31.62
3000	2.55	0.42	0.91	1.90	4.02	8.11	16.36	34.22

* Step Attenuation above Thru Loss (TTL Logic 000000).



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Digital Step Attenuator

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Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V, TEMPERATURE=+105degC

FREQUENCY (MHz)	INPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	17.84	18.25	18.38	18.51	23.12	23.28	24.80	26.64
50	17.60	18.02	18.19	18.25	22.85	22.99	24.55	26.09
100	17.68	18.13	18.34	18.43	23.17	23.43	25.14	26.84
150	17.45	17.92	18.12	18.24	22.90	23.23	24.96	26.55
200	17.49	17.97	18.18	18.31	23.01	23.36	25.12	26.81
250	17.30	17.75	17.96	18.08	22.52	22.81	24.43	25.96
300	17.29	17.72	17.94	18.03	22.31	22.52	24.00	25.51
350	17.17	17.56	17.74	17.80	21.86	21.95	23.31	24.63
400	17.24	17.62	17.78	17.79	21.75	21.77	22.98	24.27
450	17.27	17.62	17.77	17.73	21.60	21.50	22.60	23.76
500	17.41	17.76	17.88	17.81	21.65	21.48	22.55	23.68
550	17.52	17.85	17.96	17.86	21.70	21.46	22.46	23.53
600	17.68	18.02	18.12	18.02	21.93	21.68	22.66	23.78
700	18.06	18.41	18.52	18.40	22.56	22.29	23.32	24.48
800	18.27	18.66	18.80	18.71	23.18	22.93	24.15	25.50
900	18.15	18.57	18.78	18.73	23.35	23.18	24.66	26.29
1000	17.57	18.01	18.24	18.25	22.65	22.60	24.17	25.89
1100	16.70	17.12	17.37	17.41	21.38	21.40	22.86	24.39
1200	15.84	16.23	16.47	16.51	20.07	20.10	21.35	22.65
1300	15.18	15.53	15.75	15.74	18.94	18.88	19.87	20.89
1400	14.84	15.12	15.30	15.22	18.14	17.95	18.70	19.51
1500	14.92	15.15	15.26	15.10	17.82	17.51	18.01	18.66
1600	15.24	15.39	15.43	15.19	17.65	17.27	17.51	17.95
1700	15.77	15.82	15.77	15.46	17.54	17.15	17.11	17.32
1800	16.25	16.20	16.08	15.74	17.35	17.07	16.84	16.82
1900	16.59	16.45	16.29	16.03	17.14	17.08	16.69	16.48
2000	16.86	16.70	16.55	16.40	17.03	17.27	16.77	16.39
2100	17.24	17.06	16.91	16.92	17.07	17.58	16.99	16.42
2200	17.84	17.69	17.55	17.70	17.59	18.33	17.63	16.92
2300	20.03	19.88	19.75	20.05	19.51	20.49	19.42	18.35
2400	24.39	24.37	24.34	24.98	22.68	23.55	21.59	19.99
2500	32.09	35.18	38.04	43.16	24.02	23.14	21.28	19.84
2600	25.65	27.30	29.00	28.63	22.51	20.77	19.66	18.76
2700	19.89	20.82	21.73	21.91	20.53	18.85	18.27	17.75
2800	16.10	16.83	17.58	18.01	18.56	17.43	17.29	17.07
2900	13.49	14.13	14.81	15.36	16.87	16.37	16.71	16.76
3000	11.56	12.14	12.77	13.37	15.44	15.55	16.41	16.78



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IF/RF MICROWAVE COMPONENTS

Digital Step Attenuator

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Typical Performance Data

TEST CONDITIONS: INPUT POWER=-10dBm, Vdd=+3V, TEMPERATURE=+105degC

FREQUENCY (MHz)	OUTPUT RETURN LOSS AT TTL CONTROL STATE (dB)							
	000000 0 dB	000001 0.5 dB	000010 1.0 dB	000100 2.0 dB	001000 4.0 dB	010000 8.0 dB	100000 16 dB	111111 31.5 dB
10	17.70	18.25	18.11	18.39	18.21	23.12	24.97	26.47
50	17.57	18.12	17.99	18.25	18.11	22.84	24.63	26.28
100	17.75	18.33	18.19	18.51	18.41	23.43	25.41	27.18
150	17.56	18.14	18.03	18.36	18.29	23.28	25.27	26.97
200	17.46	18.05	17.96	18.32	18.27	23.24	25.27	27.03
250	17.05	17.62	17.52	17.87	17.82	22.43	24.27	25.83
300	16.80	17.33	17.25	17.59	17.52	21.89	23.59	25.03
350	16.51	17.03	16.93	17.23	17.13	21.20	22.71	23.99
400	16.42	16.93	16.81	17.09	16.95	20.90	22.30	23.50
450	16.43	16.92	16.79	17.03	16.84	20.63	21.92	23.04
500	16.54	17.01	16.87	17.09	16.89	20.65	21.89	22.98
550	16.74	17.22	17.04	17.24	17.00	20.74	21.92	22.95
600	16.94	17.41	17.24	17.43	17.16	20.99	22.15	23.21
700	17.42	17.91	17.72	17.91	17.60	21.67	22.83	23.91
800	17.86	18.41	18.20	18.41	18.05	22.43	23.70	24.84
900	18.20	18.80	18.60	18.83	18.41	23.19	24.61	25.87
1000	18.24	18.89	18.67	18.95	18.41	23.41	25.04	26.60
1100	17.94	18.58	18.38	18.66	18.04	22.93	24.73	26.48
1200	17.52	18.13	17.93	18.19	17.48	21.99	23.68	25.37
1300	17.15	17.70	17.46	17.64	16.83	20.87	22.21	23.60
1400	16.86	17.33	17.03	17.07	16.20	19.75	20.71	21.79
1500	16.63	16.98	16.61	16.55	15.67	18.74	19.41	20.23
1600	16.14	16.39	16.03	15.92	15.13	17.82	18.30	18.93
1700	15.91	16.11	15.76	15.65	14.99	17.49	17.86	18.36
1800	15.82	15.98	15.69	15.61	15.17	17.55	17.80	18.15
1900	15.99	16.13	15.90	15.86	15.66	17.95	18.05	18.21
2000	16.44	16.56	16.40	16.41	16.58	18.68	18.58	18.49
2100	17.04	17.13	17.07	17.14	17.82	19.57	19.18	18.76
2200	18.01	18.03	18.10	18.25	19.62	20.70	19.94	19.18
2300	19.39	19.44	19.61	19.86	22.23	22.15	20.81	19.65
2400	21.84	21.98	22.28	22.66	27.02	23.79	21.57	20.02
2500	25.17	25.90	26.54	27.61	35.50	24.34	21.59	19.97
2600	25.74	28.77	29.31	34.81	27.36	23.42	21.00	19.57
2700	20.68	22.58	22.75	24.90	20.96	21.25	19.83	18.85
2800	16.41	17.61	17.84	19.23	17.25	19.11	18.67	18.13
2900	13.41	14.32	14.57	15.72	14.70	17.40	17.84	17.75
3000	11.39	12.16	12.42	13.43	12.95	16.19	17.40	17.80



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