

Typical Performance Data

Frequency (MHz)	ATTENUATION vs. FREQUENCY OVER V CTRL (dB)										
	@V Ctrl 0V	@V Ctrl 1.0V	@V Ctrl 1.6V	@V Ctrl 2.0V	@V Ctrl 2.2V	@V Ctrl 2.4V	@V Ctrl 2.6V	@V Ctrl 2.8V	@V Ctrl 3.0V	@V Ctrl 3.2V	@V Ctrl 3.4V
250.0	0.95	4.24	8.99	12.90	15.30	18.23	22.15	28.28	38.18	28.63	23.44
255.0	0.95	4.24	9.00	12.91	15.31	18.25	22.18	28.33	37.94	28.53	23.38
260.0	0.95	4.24	9.00	12.92	15.32	18.27	22.21	28.39	37.71	28.42	23.33
265.0	0.96	4.25	9.01	12.93	15.34	18.30	22.24	28.44	37.48	28.32	23.27
270.0	0.96	4.25	9.02	12.95	15.36	18.32	22.28	28.48	37.26	28.23	23.23
275.0	0.96	4.26	9.03	12.96	15.38	18.34	22.32	28.55	37.04	28.13	23.18
280.0	0.97	4.27	9.04	12.98	15.40	18.37	22.35	28.59	36.84	28.05	23.14
285.0	0.97	4.27	9.05	12.99	15.42	18.40	22.38	28.64	36.64	27.96	23.09
290.0	0.98	4.28	9.06	13.01	15.44	18.42	22.41	28.68	36.45	27.89	23.06
295.0	0.99	4.29	9.07	13.03	15.45	18.45	22.45	28.73	36.27	27.82	23.02
300.0	1.00	4.30	9.08	13.04	15.47	18.47	22.48	28.77	36.09	27.75	22.99
305.0	1.01	4.31	9.10	13.06	15.49	18.49	22.50	28.80	35.94	27.69	22.96
310.0	1.02	4.32	9.11	13.07	15.51	18.51	22.54	28.84	35.79	27.63	22.93
315.0	1.03	4.33	9.12	13.09	15.53	18.54	22.56	28.87	35.65	27.58	22.91
320.0	1.04	4.34	9.13	13.10	15.54	18.56	22.59	28.90	35.53	27.53	22.89
325.0	1.05	4.35	9.14	13.11	15.56	18.58	22.61	28.92	35.42	27.50	22.87
330.0	1.06	4.36	9.16	13.13	15.58	18.59	22.63	28.94	35.32	27.46	22.86
335.0	1.07	4.37	9.17	13.14	15.59	18.61	22.65	28.97	35.25	27.44	22.85
340.0	1.08	4.38	9.18	13.16	15.60	18.62	22.67	28.98	35.19	27.43	22.85
345.0	1.09	4.39	9.19	13.17	15.62	18.63	22.68	28.99	35.14	27.42	22.85
350.0	1.11	4.41	9.20	13.18	15.63	18.65	22.69	29.00	35.11	27.42	22.85
355.0	1.12	4.42	9.22	13.19	15.64	18.65	22.70	29.00	35.10	27.43	22.87
360.0	1.13	4.43	9.22	13.20	15.65	18.66	22.70	28.99	35.11	27.45	22.88
365.0	1.14	4.44	9.23	13.20	15.65	18.67	22.70	28.98	35.16	27.48	22.91
370.0	1.16	4.45	9.24	13.21	15.66	18.67	22.70	28.97	35.21	27.52	22.93
375.0	1.17	4.46	9.25	13.22	15.66	18.67	22.69	28.96	35.31	27.58	22.97
380.0	1.19	4.47	9.26	13.22	15.66	18.66	22.68	28.94	35.42	27.65	23.01
385.0	1.20	4.48	9.26	13.22	15.66	18.66	22.66	28.90	35.58	27.73	23.07
390.0	1.22	4.49	9.27	13.22	15.65	18.65	22.65	28.86	35.77	27.83	23.13
395.0	1.23	4.51	9.28	13.22	15.65	18.63	22.62	28.83	36.00	27.96	23.20
400.0	1.25	4.52	9.28	13.22	15.64	18.62	22.58	28.77	36.28	28.10	23.29
405.0	1.26	4.53	9.28	13.21	15.63	18.59	22.55	28.71	36.60	28.26	23.38
410.0	1.28	4.54	9.29	13.21	15.62	18.57	22.50	28.63	36.98	28.46	23.49
415.0	1.30	4.55	9.29	13.20	15.60	18.54	22.46	28.55	37.42	28.67	23.61
420.0	1.32	4.56	9.29	13.19	15.58	18.51	22.40	28.45	37.93	28.94	23.75
425.0	1.33	4.57	9.29	13.18	15.56	18.47	22.33	28.33	38.5	29.22	23.91
430.0	1.35	4.59	9.29	13.16	15.53	18.42	22.26	28.2	39.13	29.56	24.09
435.0	1.37	4.6	9.29	13.15	15.5	18.38	22.17	28.05	39.78	29.96	24.29
440.0	1.39	4.61	9.29	13.13	15.47	18.32	22.08	27.87	40.4	30.4	24.51
445.0	1.42	4.62	9.29	13.11	15.43	18.26	21.97	27.67	40.85	30.91	24.77
450.0	1.44	4.64	9.28	13.08	15.39	18.19	21.86	27.45	40.99	31.51	25.05



Typical Performance Data

Frequency (MHz)	INPUT RETURN LOSS vs. FREQUENCY OVER V CTRL (dB)										
	@V Ctrl 0V	@V Ctrl 1.0V	@V Ctrl 1.6V	@V Ctrl 2.0V	@V Ctrl 2.2V	@V Ctrl 2.4V	@V Ctrl 2.6V	@V Ctrl 2.8V	@V Ctrl 3.0V	@V Ctrl 3.2V	@V Ctrl 3.4V
250.0	21.58	25.14	28.60	30.28	30.94	31.48	31.89	32.21	32.40	32.49	32.53
255.0	22.66	26.37	29.68	31.13	31.66	32.09	32.42	32.68	32.84	32.93	32.99
260.0	23.80	27.72	30.85	32.01	32.41	32.73	32.96	33.15	33.29	33.37	33.45
265.0	25.04	29.26	32.14	32.95	33.20	33.39	33.54	33.67	33.77	33.85	33.94
270.0	26.36	31.02	33.56	33.92	34.00	34.06	34.12	34.19	34.28	34.35	34.44
275.0	27.76	33.15	35.12	34.92	34.81	34.76	34.73	34.75	34.79	34.87	34.97
280.0	29.20	35.77	36.78	35.90	35.60	35.41	35.32	35.29	35.33	35.41	35.51
285.0	30.56	39.26	38.55	36.82	36.36	36.08	35.93	35.86	35.90	35.99	36.11
290.0	31.74	44.42	40.05	37.62	37.02	36.68	36.50	36.42	36.46	36.57	36.69
295.0	32.42	50.58	40.97	38.20	37.58	37.23	37.03	36.98	37.03	37.18	37.35
300.0	32.52	45.50	40.80	38.46	37.95	37.64	37.51	37.51	37.61	37.79	38.00
305.0	32.07	40.66	39.87	38.43	38.09	37.92	37.91	37.98	38.15	38.40	38.68
310.0	31.33	37.53	38.56	38.06	38.02	38.04	38.16	38.37	38.65	38.98	39.35
315.0	30.46	35.35	37.24	37.56	37.77	38.01	38.30	38.66	39.08	39.53	40.03
320.0	29.61	33.69	36.00	36.88	37.32	37.78	38.24	38.77	39.33	39.94	40.56
325.0	28.83	32.40	34.95	36.19	36.81	37.41	38.08	38.77	39.48	40.24	41.05
330.0	28.13	31.36	34.03	35.51	36.24	36.99	37.77	38.57	39.45	40.34	41.30
335.0	27.48	30.45	33.19	34.80	35.61	36.45	37.32	38.22	39.17	40.17	41.27
340.0	26.97	29.75	32.49	34.19	35.04	35.93	36.83	37.80	38.80	39.88	41.06
345.0	26.51	29.12	31.85	33.58	34.45	35.35	36.26	37.23	38.22	39.32	40.46
350.0	26.11	28.61	31.30	33.02	33.89	34.79	35.67	36.61	37.62	38.65	39.73
355.0	25.80	28.18	30.81	32.50	33.35	34.22	35.08	35.98	36.92	37.89	38.86
360.0	25.53	27.81	30.38	32.02	32.84	33.67	34.50	35.33	36.20	37.09	37.94
365.0	25.34	27.52	29.99	31.58	32.35	33.14	33.91	34.67	35.45	36.24	36.99
370.0	25.18	27.27	29.65	31.16	31.88	32.61	33.32	34.02	34.71	35.40	36.04
375.0	25.08	27.08	29.36	30.77	31.45	32.11	32.76	33.38	33.98	34.57	35.10
380.0	25.04	26.95	29.10	30.42	31.05	31.65	32.22	32.76	33.29	33.77	34.21
385.0	25.06	26.87	28.89	30.09	30.66	31.18	31.69	32.16	32.59	32.99	33.36
390.0	25.14	26.85	28.72	29.80	30.31	30.77	31.20	31.59	31.95	32.26	32.54
395.0	25.26	26.87	28.58	29.54	29.97	30.36	30.72	31.03	31.31	31.56	31.76
400.0	25.44	26.93	28.47	29.29	29.65	29.96	30.24	30.49	30.70	30.86	31.00
405.0	25.69	27.05	28.39	29.07	29.35	29.59	29.80	29.96	30.10	30.20	30.29
410.0	26.01	27.22	28.34	28.87	29.07	29.23	29.36	29.45	29.52	29.56	29.59
415.0	26.37	27.43	28.31	28.67	28.79	28.87	28.92	28.95	28.95	28.93	28.90
420.0	26.84	27.72	28.33	28.50	28.54	28.53	28.51	28.46	28.40	28.33	28.24
425.0	27.36	28.05	28.38	28.35	28.29	28.20	28.10	27.99	27.86	27.74	27.61
430.0	27.95	28.43	28.44	28.20	28.05	27.87	27.69	27.51	27.32	27.14	26.97
435.0	28.63	28.90	28.54	28.08	27.82	27.56	27.30	27.05	26.81	26.58	26.36
440.0	29.29	29.40	28.65	27.95	27.59	27.24	26.90	26.59	26.29	26.01	25.75
445.0	29.95	29.96	28.81	27.84	27.37	26.93	26.52	26.14	25.78	25.46	25.16
450.0	30.49	30.57	29.00	27.74	27.16	26.63	26.13	25.69	25.28	24.92	24.58



Typical Performance Data

Frequency (MHz)	OUTPUT RETURN LOSS vs. FREQUENCY OVER V CTRL (dB)										
	@V Ctrl 0V	@V Ctrl 1.0V	@V Ctrl 1.6V	@V Ctrl 2.0V	@V Ctrl 2.2V	@V Ctrl 2.4V	@V Ctrl 2.6V	@V Ctrl 2.8V	@V Ctrl 3.0V	@V Ctrl 3.2V	@V Ctrl 3.4V
250.0	22.74	27.33	32.07	33.84	34.15	34.12	33.87	33.48	33.00	32.51	32.03
255.0	24.08	28.95	33.29	34.36	34.40	34.20	33.89	33.50	33.08	32.66	32.25
260.0	25.59	30.77	34.37	34.65	34.45	34.17	33.83	33.48	33.12	32.76	32.43
265.0	27.32	32.91	35.14	34.67	34.33	34.02	33.70	33.39	33.11	32.83	32.58
270.0	29.39	35.35	35.43	34.45	34.07	33.77	33.52	33.27	33.07	32.88	32.69
275.0	31.97	37.88	35.19	34.05	33.69	33.45	33.27	33.10	32.97	32.86	32.76
280.0	35.46	39.35	34.55	33.50	33.23	33.08	32.97	32.90	32.85	32.82	32.79
285.0	40.87	38.47	33.68	32.90	32.73	32.66	32.65	32.65	32.68	32.73	32.77
290.0	54.89	36.39	32.77	32.27	32.20	32.23	32.30	32.38	32.49	32.61	32.71
295.0	44.86	34.36	31.88	31.64	31.69	31.79	31.94	32.10	32.28	32.47	32.62
300.0	38.13	32.60	31.04	31.05	31.18	31.36	31.57	31.79	32.04	32.28	32.50
305.0	34.54	31.15	30.27	30.49	30.69	30.94	31.21	31.50	31.79	32.07	32.34
310.0	32.16	29.95	29.57	29.96	30.23	30.53	30.85	31.18	31.52	31.84	32.15
315.0	30.37	28.93	28.94	29.45	29.78	30.12	30.49	30.86	31.22	31.59	31.92
320.0	29.02	28.08	28.38	29.00	29.37	29.74	30.14	30.54	30.93	31.31	31.68
325.0	27.89	27.33	27.86	28.56	28.96	29.37	29.78	30.21	30.62	31.01	31.39
330.0	26.99	26.69	27.39	28.16	28.58	29.01	29.44	29.87	30.29	30.70	31.07
335.0	26.22	26.13	26.97	27.78	28.22	28.66	29.09	29.54	29.96	30.36	30.73
340.0	25.57	25.64	26.58	27.42	27.87	28.32	28.76	29.20	29.62	30.01	30.38
345.0	25.03	25.22	26.23	27.09	27.53	27.98	28.43	28.86	29.26	29.65	30.00
350.0	24.54	24.83	25.90	26.77	27.21	27.65	28.09	28.50	28.90	29.26	29.60
355.0	24.14	24.50	25.60	26.46	26.90	27.33	27.76	28.15	28.53	28.88	29.19
360.0	23.79	24.21	25.32	26.17	26.60	27.02	27.42	27.79	28.15	28.47	28.76
365.0	23.50	23.95	25.06	25.89	26.30	26.69	27.08	27.43	27.76	28.05	28.32
370.0	23.25	23.73	24.83	25.63	26.02	26.39	26.75	27.07	27.38	27.65	27.89
375.0	23.05	23.55	24.62	25.38	25.74	26.09	26.43	26.71	26.99	27.24	27.45
380.0	22.89	23.39	24.42	25.14	25.48	25.81	26.10	26.37	26.61	26.83	27.01
385.0	22.75	23.26	24.25	24.92	25.23	25.52	25.79	26.02	26.23	26.42	26.58
390.0	22.66	23.17	24.10	24.71	24.99	25.25	25.48	25.69	25.86	26.02	26.15
395.0	22.59	23.09	23.96	24.51	24.76	24.98	25.18	25.35	25.49	25.62	25.72
400.0	22.54	23.05	23.84	24.33	24.54	24.72	24.88	25.01	25.13	25.21	25.29
405.0	22.52	23.03	23.75	24.16	24.32	24.48	24.59	24.69	24.76	24.83	24.87
410.0	22.52	23.03	23.67	24.00	24.13	24.24	24.31	24.37	24.41	24.44	24.45
415.0	22.52	23.05	23.61	23.85	23.94	24.00	24.03	24.05	24.06	24.05	24.03
420.0	22.53	23.09	23.56	23.72	23.75	23.77	23.76	23.74	23.71	23.67	23.63
425.0	22.54	23.16	23.53	23.58	23.57	23.54	23.49	23.43	23.36	23.28	23.21
430.0	22.55	23.23	23.51	23.46	23.39	23.31	23.21	23.12	23.01	22.90	22.79
435.0	22.56	23.33	23.51	23.34	23.22	23.09	22.94	22.80	22.66	22.51	22.38
440.0	22.53	23.43	23.51	23.23	23.05	22.86	22.67	22.48	22.30	22.13	21.95
445.0	22.49	23.54	23.53	23.12	22.88	22.64	22.40	22.17	21.94	21.74	21.54
450.0	22.40	23.66	23.55	23.02	22.71	22.41	22.12	21.84	21.59	21.34	21.11



Typical Performance Data

Frequency (MHz)	PHASE SHIFT vs. FREQUENCY OVER V CTRL (Deg.)									
	@V Ctrl 1.0V	@V Ctrl 1.6V	@V Ctrl 2.0V	@V Ctrl 2.2V	@V Ctrl 2.4V	@V Ctrl 2.6V	@V Ctrl 2.8V	@V Ctrl 3.0V	@V Ctrl 3.2V	@V Ctrl 3.4V
250.0	0.60	0.45	-0.35	-1.19	-2.72	-5.91	-15.35	-90.24	-157.12	-165.94
255.0	0.59	0.40	-0.42	-1.30	-2.88	-6.17	-15.97	-91.90	-156.88	-165.74
260.0	0.57	0.37	-0.49	-1.40	-3.03	-6.43	-16.58	-93.32	-156.61	-165.54
265.0	0.56	0.33	-0.56	-1.50	-3.18	-6.68	-17.19	-94.81	-156.38	-165.34
270.0	0.56	0.30	-0.62	-1.59	-3.32	-6.93	-17.78	-95.97	-156.11	-165.14
275.0	0.55	0.27	-0.69	-1.68	-3.46	-7.18	-18.35	-97.06	-155.88	-164.94
280.0	0.54	0.24	-0.74	-1.76	-3.59	-7.41	-18.94	-98.28	-155.64	-164.74
285.0	0.54	0.22	-0.79	-1.84	-3.72	-7.64	-19.49	-99.14	-155.38	-164.54
290.0	0.54	0.20	-0.84	-1.91	-3.83	-7.86	-20.07	-100.00	-155.14	-164.34
295.0	0.54	0.19	-0.88	-1.98	-3.94	-8.06	-20.56	-100.75	-154.91	-164.14
300.0	0.54	0.17	-0.92	-2.04	-4.04	-8.26	-21.09	-101.55	-154.69	-163.95
305.0	0.54	0.16	-0.95	-2.10	-4.14	-8.45	-21.57	-102.17	-154.45	-163.76
310.0	0.54	0.15	-0.98	-2.15	-4.23	-8.61	-22.00	-102.54	-154.23	-163.58
315.0	0.54	0.15	-1.00	-2.19	-4.30	-8.77	-22.42	-103.11	-154.03	-163.40
320.0	0.55	0.15	-1.02	-2.23	-4.38	-8.91	-22.82	-103.48	-153.81	-163.22
325.0	0.55	0.15	-1.03	-2.25	-4.44	-9.05	-23.15	-103.84	-153.63	-163.06
330.0	0.56	0.16	-1.04	-2.27	-4.48	-9.14	-23.44	-104.00	-153.42	-162.90
335.0	0.57	0.16	-1.04	-2.28	-4.52	-9.23	-23.68	-104.14	-153.26	-162.75
340.0	0.58	0.18	-1.04	-2.29	-4.54	-9.30	-23.91	-104.34	-153.10	-162.62
345.0	0.59	0.19	-1.03	-2.29	-4.55	-9.33	-24.02	-104.28	-152.94	-162.50
350.0	0.60	0.21	-1.01	-2.27	-4.54	-9.35	-24.10	-104.27	-152.83	-162.40
355.0	0.61	0.23	-0.98	-2.25	-4.52	-9.33	-24.09	-104.02	-152.71	-162.30
360.0	0.63	0.26	-0.95	-2.21	-4.48	-9.29	-24.05	-103.93	-152.62	-162.24
365.0	0.64	0.29	-0.91	-2.16	-4.42	-9.21	-23.89	-103.58	-152.54	-162.19
370.0	0.66	0.33	-0.86	-2.10	-4.35	-9.09	-23.63	-103.06	-152.51	-162.16
375.0	0.68	0.37	-0.80	-2.03	-4.25	-8.95	-23.32	-102.61	-152.50	-162.16
380.0	0.70	0.41	-0.73	-1.94	-4.13	-8.76	-22.88	-101.92	-152.50	-162.19
385.0	0.72	0.46	-0.65	-1.84	-3.99	-8.53	-22.38	-101.13	-152.57	-162.26
390.0	0.74	0.51	-0.56	-1.72	-3.82	-8.26	-21.72	-100.09	-152.68	-162.37
395.0	0.76	0.57	-0.46	-1.59	-3.63	-7.94	-20.96	-98.93	-152.84	-162.51
400.0	0.78	0.64	-0.35	-1.44	-3.41	-7.57	-20.13	-97.58	-153.04	-162.71
405.0	0.81	0.70	-0.23	-1.27	-3.16	-7.15	-19.13	-95.69	-153.32	-162.97
410.0	0.83	0.78	-0.09	-1.08	-2.88	-6.68	-18.02	-93.60	-153.70	-163.28
415.0	0.86	0.86	0.05	-0.87	-2.57	-6.14	-16.76	-91.07	-154.16	-163.66
420.0	0.89	0.95	0.22	-0.64	-2.22	-5.55	-15.39	-87.78	-154.73	-164.13
425.0	0.92	1.04	0.40	-0.38	-1.84	-4.89	-13.87	-83.59	-155.45	-164.70
430.0	0.95	1.14	0.59	-0.11	-1.42	-4.17	-12.22	-78.26	-156.34	-165.36
435.0	0.98	1.25	0.80	0.20	-0.96	-3.40	-10.46	-71.57	-157.44	-166.16
440.0	1.02	1.37	1.03	0.53	-0.45	-2.54	-8.55	-62.70	-158.79	-167.11
445.0	1.05	1.49	1.28	0.89	0.09	-1.63	-6.54	-51.98	-160.52	-168.22
450.0	1.09	1.63	1.55	1.27	0.67	-0.65	-4.41	-38.86	-162.69	-169.56

