Voltage Variable Attenuator RVA-33+

Typical Performance Data

V CONTROL (V)	ATTENUATION @ 1500 MHz (dB) @V+=5V
0.0	40.25
0.8	34.54
0.9	24.40
1.0	18.43
1.1	15.28
1.2	13.38
2.0	8.43
3.0	6.17
4.0	4.29
5.0	2.41

FREQ. (MHz)	ATTENUATION Vs. V CONTROL @ V+=5V (dB)						
	@V Control=0V	@V Control=0.8V	@V Control=0.9V	@V Control=1V	@V Control=2V	@V Control=3V	@V Control=5V
20	73.07	31.56	22.88	18.19	8.15	5.78	2.47
30	66.89	31.26	22.81	18.16	8.14	5.73	2.30
40	73.63	31.34	22.84	18.16	8.15	5.73	2.25
50	69.36	31.23	22.81	18.14	8.13	5.71	2.20
80	61.78	31.23	22.78	18.12	8.12	5.70	2.15
100	60.73	31.24	22.79	18.11	8.14	5.71	2.13
150	57.22	31.26	22.76	18.10	8.15	5.70	2.10
200	55.09	31.40	22.76	18.10	8.15	5.71	2.09
250	53.77	31.55	22.79	18.11	8.16	5.73	2.09
300	52.26	31.76	22.82	18.10	8.17	5.75	2.09
350	51.01	31.97	22.86	18.11	8.19	5.75	2.09
400	50.17	32.25	22.90	18.12	8.20	5.77	2.10
450	49.29	32.49	22.96	18.13	8.22	5.79	2.12
500	48.47	32.72	23.00	18.15	8.23	5.81	2.13
600	47.08	33.15	23.15	18.17	8.26	5.85	2.17
700	45.96	33.55	23.27	18.20	8.29	5.88	2.19
800	44.96	33.87	23.39	18.22	8.31	5.91	2.21
900	44.07	34.11	23.52	18.24	8.32	5.94	2.23
1000	43.30	34.34	23.68	18.27	8.34	5.97	2.26
1100	42.56	34.45	23.82	18.28	8.35	6.01	2.28
1200	41.91	34.58	23.96	18.32	8.38	6.05	2.31
1300	41.31	34.59	24.11	18.35	8.39	6.08	2.34
1400	40.76	34.61	24.24	18.39	8.40	6.12	2.36
1500	40.25	34.54	24.40	18.43	8.43	6.17	2.41
1600	39.77	34.48	24.52	18.47	8.45	6.21	2.44
1700	39.32	34.41	24.64	18.54	8.47	6.26	2.48
1800	38.89	34.27	24.78	18.58	8.50	6.31	2.51
1900	38.47	34.15	24.89	18.63	8.51	6.37	2.55
2000	38.13	34.02	25.02	18.70	8.55	6.44	2.61
2200	37.39	33.72	25.22	18.83	8.61	6.56	2.70
2400	36.76	33.43	25.39	19.00	8.66	6.68	2.79
2600	36.02	33.03	25.51	19.15	8.70	6.80	2.91
2800	35.49	32.70	25.61	19.33	8.76	6.93	3.06
3000	34.98	32.28	25.59	19.50	8.81	7.06	3.26

Typical Performance Data

FREQ. (MHz)	INPUT RETURN LOSS Vs. V CONTROL @ V+=5V (dB)						
	@V Control=0V	@V Control=0.8V	@V Control=0.9V	@V Control=1V	@V Control=2V	@V Control=3V	@V Control=5V
20	22.98	25.81	24.89	21.16	12.35	12.86	19.98
30	25.06	28.86	26.69	21.72	12.42	13.02	22.51
40	26.46	31.41	27.77	21.88	12.43	13.08	24.15
50	27.37	33.62	28.25	21.91	12.40	13.06	25.00
80	28.95	40.29	28.80	21.92	12.39	13.07	26.39
100	29.50	45.74	28.71	21.86	12.38	13.09	27.01
150	29.35	43.79	28.60	21.81	12.39	13.13	28.02
200	28.82	38.34	28.22	21.71	12.40	13.15	28.50
250	27.94	35.11	27.95	21.66	12.41	13.18	28.92
300	27.00	32.44	27.34	21.53	12.40	13.19	28.85
350	26.29	30.92	26.87	21.38	12.40	13.18	29.10
400	25.44	29.41	26.40	21.27	12.39	13.19	29.07
450	24.76	28.24	25.87	21.08	12.37	13.18	29.07
500	24.11	27.27	25.44	20.96	12.36	13.17	28.96
600	22.97	25.63	24.57	20.64	12.33	13.15	28.70
700	22.03	24.42	23.91	20.42	12.34	13.15	28.59
800	21.21	23.42	23.33	20.20	12.32	13.16	28.40
900	20.45	22.56	22.85	20.02	12.35	13.22	28.48
1000	19.79	21.83	22.38	19.86	12.37	13.25	28.34
1100	19.12	21.12	21.96	19.73	12.43	13.35	28.60
1200	18.45	20.41	21.50	19.59	12.49	13.43	28.60
1300	17.78	19.73	21.09	19.50	12.58	13.56	28.65
1400	17.12	19.06	20.69	19.44	12.72	13.74	28.89
1500	16.50	18.42	20.26	19.35	12.86	13.93	29.15
1600	15.87	17.77	19.73	19.14	12.96	14.09	29.12
1700	15.22	17.07	19.13	18.86	13.05	14.23	28.71
1800	14.58	16.37	18.48	18.52	13.14	14.37	28.32
1900	13.95	15.69	17.82	18.12	13.21	14.49	27.86
2000	13.40	15.08	17.19	17.66	13.24	14.58	27.52
2200	12.32	13.89	15.85	16.51	13.11	14.56	27.67
2400	11.31	12.76	14.58	15.30	12.85	14.36	28.14
2600	10.56	11.94	13.61	14.27	12.57	14.12	27.94
2800	9.94	11.27	12.75	13.28	12.11	13.58	22.91
3000	9.50	10.80	12.17	12.56	11.72	12.99	18.38

Typical Performance Data

FREQ. (MHz)	OUTPUT RETURN LOSS Vs. V CONTROL @ V+=5V (dB)						
	@V Control=0V	@V Control=0.8V	@V Control=0.9V	@V Control=1V	@V Control=2V	@V Control=3V	@V Control=5V
20	22.35	25.29	25.12	21.60	12.48	12.96	20.02
30	24.40	28.34	27.14	21.97	12.47	13.06	22.53
40	25.77	30.63	28.10	22.10	12.45	13.08	24.13
50	26.58	32.66	28.77	22.21	12.44	13.08	25.05
80	27.95	37.56	29.57	22.23	12.43	13.10	26.63
100	28.43	40.59	29.55	22.17	12.42	13.11	27.15
150	28.52	42.13	29.53	22.15	12.44	13.17	28.18
200	28.02	38.50	29.34	22.14	12.48	13.23	28.88
250	27.38	35.69	29.11	22.16	12.51	13.29	29.47
300	26.59	33.07	28.55	22.06	12.53	13.33	29.63
350	25.96	31.37	27.86	21.86	12.51	13.32	29.53
400	25.40	30.12	27.38	21.74	12.51	13.33	29.78
450	24.84	29.02	26.83	21.58	12.51	13.33	29.84
500	24.20	28.01	26.51	21.54	12.54	13.37	29.95
600	23.14	26.36	25.67	21.33	12.56	13.42	30.13
700	22.13	24.96	24.90	21.11	12.61	13.49	30.19
800	21.21	23.75	24.15	20.89	12.64	13.54	30.20
900	20.40	22.77	23.55	20.73	12.70	13.63	30.26
1000	19.58	21.79	22.84	20.46	12.74	13.69	30.19
1100	18.84	20.91	22.18	20.21	12.79	13.77	30.08
1200	18.15	20.14	21.58	19.99	12.87	13.88	30.11
1300	17.47	19.37	20.95	19.72	12.93	13.98	29.52
1400	16.79	18.62	20.34	19.47	13.01	14.10	29.16
1500	16.14	17.88	19.65	19.07	13.05	14.16	28.30
1600	15.47	17.15	18.97	18.71	13.12	14.27	27.80
1700	14.86	16.45	18.28	18.23	13.13	14.31	26.95
1800	14.22	15.76	17.53	17.68	13.09	14.32	26.17
1900	13.64	15.11	16.83	17.12	13.04	14.29	25.47
2000	13.10	14.50	16.14	16.55	12.98	14.28	24.97
2200	12.08	13.36	14.88	15.35	12.73	14.13	24.86
2400	11.19	12.35	13.68	14.17	12.36	13.83	25.00
2600	10.46	11.54	12.68	13.07	11.94	13.44	24.47
2800	9.95	10.95	11.92	12.18	11.53	13.01	21.54
3000	9.56	10.51	11.31	11.43	11.08	12.41	17.67

Typical Performance Data

FREQ. (MHz)	INPUT IP3 Vs. V CONTROL @ V+=5V (dBm)
	@V Control=5V
20	35.61
30	38.71
40	43.18
50	44.72
80	47.19
100	52.23
150	56.18
200	57.58
250	57.36
300	56.59
350	57.10
400	56.68
450	56.17
500	56.32
600	57.78
700	58.74
800	58.28
900	57.82
1000	58.21
1100	57.06
1200	55.63
1300	56.62
1400	55.06
1500	55.87
1600	57.15
1700	55.91
1800	55.98
1900	56.24
2000	56.53
2200	56.35
2400	55.95
2600	55.24
2800	55.37
3000	55.29

FREQ. (MHz)	INPUT IP2 Vs. V CONTROL @ V+=5V (dBm)
	@V Control=5V
20	55.00
225	75.28
500	80.17
1000	85.34
1500	71.39
2250	89.27
3000	93.50

Typical Performance Data

FREQ. (MHz)	PHASE SHIFT Vs. V CONTROL @ V+=5V (deg)						
	@V Control=0V	@V Control=0.8V	@V Control=0.9V	@V Control=1V	@V Control=2V	@V Control=3V	@V Control=5V
20	300.24	407.82	367.86	365.76	364.68	366.42	370.88
30	506.11	388.27	362.76	361.09	360.43	361.56	364.83
40	507.44	385.53	359.34	358.16	357.48	358.23	360.83
50	516.18	382.54	356.74	355.83	354.95	355.54	357.67
80	449.99	379.88	350.65	350.14	349.02	349.23	350.63
100	444.44	378.15	347.03	346.58	345.37	345.44	346.57
150	429.52	368.07	338.60	338.46	336.91	336.71	337.37
200	419.21	363.49	330.41	330.57	328.65	328.26	328.54
250	410.75	359.59	322.34	322.68	320.46	319.84	319.94
300	402.59	352.24	314.43	314.96	312.43	311.55	311.41
350	394.87	347.77	306.62	307.28	304.38	303.27	302.96
400	387.42	338.13	298.84	299.60	296.38	295.06	294.52
450	380.35	329.00	291.12	291.99	288.39	286.89	286.13
500	373.36	320.43	283.46	284.34	280.38	278.71	277.75
600	359.16	312.35	268.29	269.15	264.44	262.47	261.18
700	345.14	304.53	253.23	254.00	248.64	246.20	244.59
800	331.38	297.21	238.33	238.88	232.81	230.11	228.07
900	317.43	290.13	223.47	223.65	216.96	213.91	211.55
1000	303.82	283.34	208.77	208.48	201.11	197.70	194.99
1100	290.35	270.23	194.16	193.38	185.26	181.49	178.44
1200	276.57	257.80	179.62	178.14	169.36	165.26	161.87
1300	262.76	245.79	165.20	162.88	153.45	149.03	145.26
1400	249.28	234.09	150.87	147.67	137.55	132.78	128.68
1500	235.54	222.61	136.55	132.46	121.57	116.53	112.03
1600	222.09	211.27	122.35	117.26	105.63	100.28	95.43
1700	208.37	200.03	108.16	101.93	89.63	83.97	78.74
1800	194.94	188.60	94.10	86.78	73.67	67.70	62.13
1900	181.34	177.24	80.05	71.44	57.64	51.40	45.42
2000	167.99	165.42	66.03	56.17	41.56	35.10	28.67
2200	141.27	153.72	38.19	25.70	9.51	2.56	-4.86
2400	114.48	142.08	10.27	-4.82	-22.66	-30.10	-38.60
2600	87.55	129.86	-17.39	-35.24	-55.00	-62.73	-72.56
2800	60.76	117.85	-45.06	-65.54	-87.41	-95.58	-106.88
3000	33.90	105.48	-72.88	-95.69	-120.03	-128.52	-141.33