

## Typical Performance Data

Frequency (MHz)	Attenuation (dB) vs Frequency over Vctrl				
	0V	0.5V	0.6V	0.7V	0.85V
6000	0.00	1.01	5.12	14.75	23.96
6100	0.00	1.01	5.15	14.76	23.93
6200	0.00	1.02	5.18	14.82	23.90
6300	0.00	1.03	5.20	14.87	23.87
6400	0.00	1.04	5.22	14.90	23.83
6500	0.00	1.04	5.25	14.93	23.79
6600	0.00	1.06	5.26	14.96	23.75
6700	0.00	1.06	5.30	14.97	23.69
6800	0.00	1.07	5.31	14.98	23.63
6900	0.00	1.06	5.32	14.98	23.57
7000	0.00	1.07	5.33	15.01	23.51
7100	0.00	1.07	5.34	15.00	23.42
7200	0.00	1.07	5.34	14.99	23.34
7300	0.00	1.07	5.33	14.92	23.25
7400	0.00	1.07	5.31	14.92	23.15
7500	0.00	1.07	5.33	14.91	23.05
7600	0.00	1.06	5.31	14.85	22.94
7700	0.00	1.06	5.30	14.82	22.82
7800	0.00	1.06	5.25	14.78	22.71
7900	0.00	1.05	5.24	14.73	22.57
8000	0.00	1.04	5.21	14.68	22.45
8100	0.00	1.04	5.19	14.59	22.32
8200	0.00	1.03	5.17	14.54	22.18
8300	0.00	1.02	5.14	14.46	22.05
8400	0.00	1.01	5.11	14.41	21.91
8500	0.00	1.00	5.07	14.36	21.78
8600	0.00	1.00	5.05	14.34	21.71
8700	0.00	0.99	5.04	14.27	21.58
8800	0.00	0.99	4.99	14.18	21.44
8900	0.00	0.98	4.97	14.11	21.32
9000	0.00	0.97	4.94	14.07	21.20
9100	0.00	0.97	4.93	14.01	21.08
9200	0.00	0.96	4.90	13.97	20.96
9300	0.00	0.96	4.88	13.91	20.86
9400	0.00	0.95	4.85	13.89	20.76
9500	0.00	0.95	4.84	13.85	20.67
9600	0.00	0.95	4.84	13.82	20.60
9700	0.00	0.95	4.84	13.81	20.53
9800	0.00	0.95	4.83	13.80	20.47
9900	0.00	0.94	4.84	13.80	20.42
10000	0.00	0.95	4.83	13.82	20.38
10100	0.00	0.95	4.85	13.84	20.36
10200	0.00	0.96	4.88	13.88	20.34
10300	0.00	0.96	4.89	13.89	20.33
10400	0.00	0.96	4.92	13.93	20.33
10500	0.00	0.97	4.95	13.97	20.34
10600	0.00	0.98	4.98	14.04	20.36
10700	0.00	0.99	5.03	14.11	20.39
10800	0.00	1.00	5.06	14.17	20.42
10900	0.00	1.00	5.10	14.25	20.46
11000	0.00	1.02	5.14	14.31	20.50
11100	0.00	1.03	5.20	14.40	20.56
11200	0.00	1.05	5.26	14.49	20.61
11300	0.00	1.06	5.31	14.56	20.66
11400	0.00	1.07	5.36	14.65	20.71
11500	0.00	1.08	5.40	14.74	20.77
11600	0.00	1.10	5.47	14.83	20.82
11700	0.00	1.11	5.52	14.92	20.87
11800	0.00	1.13	5.58	14.97	20.92
11900	0.00	1.14	5.64	15.05	20.96
12000	0.00	1.16	5.68	15.12	21.00



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## Typical Performance Data

Control Voltage (V)	Attenuation (dB) vs Vctrl over Frequency		
	Freq. = 6 GHz	Freq. = 9 GHz	Freq. = 12 GHz
0.00	0.00	0.00	0.00
0.05	0.01	0.01	0.01
0.10	0.01	0.01	0.01
0.15	0.01	0.01	0.01
0.20	0.01	0.01	0.01
0.25	0.01	0.01	0.01
0.30	0.03	0.02	0.03
0.35	0.06	0.06	0.07
0.40	0.16	0.15	0.18
0.45	0.40	0.39	0.46
0.50	1.01	0.97	1.16
0.51	1.21	1.16	1.38
0.52	1.44	1.39	1.64
0.53	1.71	1.64	1.96
0.54	2.02	1.95	2.31
0.55	2.39	2.31	2.73
0.56	2.81	2.70	3.17
0.57	3.28	3.17	3.72
0.58	3.83	3.69	4.30
0.59	4.43	4.28	4.98
0.60	5.12	4.94	5.71
0.61	5.85	5.64	6.48
0.62	6.66	6.42	7.33
0.63	7.54	7.27	8.26
0.64	8.47	8.16	9.18
0.65	9.43	9.09	10.19
0.66	10.46	10.05	11.19
0.67	11.52	11.05	12.21
0.68	12.59	12.05	13.22
0.69	13.67	13.04	14.21
0.70	14.75	14.04	15.15
0.71	15.81	14.98	16.05
0.72	16.81	15.89	16.87
0.73	17.80	16.72	17.62
0.74	18.72	17.49	18.27
0.75	19.55	18.15	18.83
0.76	20.32	18.74	19.30
0.77	21.01	19.26	19.70
0.78	21.64	19.70	20.05
0.79	22.20	20.09	20.31
0.80	22.63	20.36	20.51
0.81	22.98	20.58	20.65
0.82	23.30	20.77	20.78
0.83	23.56	20.92	20.88
0.84	23.78	21.04	20.95
0.85	23.96	21.14	21.01
0.86	24.12	21.22	21.06
0.87	24.25	21.28	21.10
0.88	24.36	21.34	21.13
0.89	24.45	21.38	21.15
0.90	24.54	21.42	21.17
0.91	24.61	21.45	21.18
0.92	24.66	21.48	21.20
0.93	24.72	21.50	21.21
0.94	24.76	21.52	21.21
0.95	24.80	21.53	21.22
0.96	24.83	21.54	21.22
0.97	24.86	21.55	21.23
0.98	24.90	21.57	21.24
0.99	24.92	21.58	21.24
1.00	24.95	21.59	21.24

## Typical Performance Data

Control Voltage (V)	Input Return Loss (dB) vs Vctrl over Frequency		
	Freq = 6 GHz	Freq = 9 GHz	Freq = 12 GHz
0.00	10.55	20.11	15.71
0.05	10.56	20.13	15.70
0.10	10.55	20.11	15.71
0.15	10.55	20.09	15.72
0.20	10.55	20.09	15.72
0.25	10.55	20.05	15.72
0.30	10.54	19.98	15.73
0.35	10.51	19.76	15.75
0.40	10.44	19.18	15.78
0.45	10.25	17.82	15.64
0.50	9.64	15.05	14.45
0.51	9.42	14.33	13.92
0.52	9.17	13.54	13.30
0.53	8.85	12.73	12.56
0.54	8.49	11.87	11.76
0.55	8.07	11.00	10.88
0.56	7.61	10.16	10.03
0.57	7.12	9.29	9.11
0.58	6.59	8.46	8.25
0.59	6.06	7.65	7.41
0.60	5.51	6.87	6.62
0.61	5.00	6.18	5.91
0.62	4.49	5.52	5.25
0.63	4.02	4.91	4.64
0.64	3.58	4.37	4.12
0.65	3.20	3.88	3.63
0.66	2.84	3.46	3.23
0.67	2.52	3.07	2.86
0.68	2.25	2.74	2.56
0.69	2.00	2.45	2.29
0.70	1.80	2.20	2.06
0.71	1.62	1.99	1.87
0.72	1.47	1.80	1.70
0.73	1.33	1.65	1.56
0.74	1.22	1.52	1.44
0.75	1.13	1.41	1.35
0.76	1.05	1.32	1.26
0.77	0.99	1.24	1.19
0.78	0.94	1.18	1.15
0.79	0.89	1.12	1.10
0.80	0.85	1.08	1.05
0.81	0.81	1.04	1.02
0.82	0.79	1.01	0.99
0.83	0.77	0.98	0.97
0.84	0.75	0.96	0.95
0.85	0.73	0.94	0.93
0.86	0.71	0.92	0.92
0.87	0.70	0.90	0.90
0.88	0.69	0.89	0.89
0.89	0.68	0.88	0.88
0.90	0.67	0.87	0.87
0.91	0.66	0.86	0.86
0.92	0.66	0.85	0.86
0.93	0.65	0.84	0.85
0.94	0.65	0.84	0.84
0.95	0.64	0.83	0.84
0.96	0.64	0.83	0.83
0.97	0.63	0.82	0.83
0.98	0.63	0.82	0.83
0.99	0.63	0.81	0.82
1.00	0.62	0.81	0.82

## Typical Performance Data

Frequency (MHz)	Input Return Loss (dB) vs Frequency over Vctrl				
	@Vctrl 0V	@Vctrl 0.5V	@Vctrl 0.6V	@Vctrl 0.7V	@Vctrl 0.85V
6000	9.17	8.67	5.44	1.82	0.72
6100	9.26	8.73	5.44	1.82	0.72
6200	9.36	8.81	5.45	1.82	0.72
6300	9.44	8.86	5.44	1.82	0.72
6400	9.56	8.96	5.45	1.81	0.72
6500	9.69	9.05	5.46	1.81	0.72
6600	9.82	9.14	5.47	1.80	0.72
6700	9.99	9.27	5.48	1.80	0.72
6800	10.15	9.38	5.50	1.80	0.73
6900	10.34	9.50	5.50	1.80	0.72
7000	10.55	9.64	5.51	1.80	0.73
7100	10.77	9.80	5.53	1.80	0.73
7200	11.02	9.96	5.56	1.80	0.73
7300	11.26	10.11	5.58	1.80	0.74
7400	11.54	10.29	5.60	1.80	0.73
7500	11.87	10.51	5.63	1.81	0.74
7600	12.17	10.67	5.66	1.81	0.74
7700	12.53	10.89	5.68	1.81	0.74
7800	12.91	11.11	5.72	1.82	0.75
7900	13.27	11.33	5.75	1.83	0.76
8000	13.68	11.54	5.79	1.83	0.76
8100	14.12	11.78	5.84	1.84	0.76
8200	14.56	12.01	5.87	1.85	0.77
8300	14.99	12.22	5.93	1.87	0.78
8400	15.41	12.42	5.97	1.87	0.77
8500	15.90	12.65	6.00	1.89	0.79
8600	16.35	12.88	6.06	1.91	0.79
8700	16.80	13.08	6.10	1.92	0.79
8800	17.27	13.31	6.19	1.94	0.81
8900	17.66	13.49	6.23	1.96	0.82
9000	18.05	13.68	6.29	1.98	0.83
9100	18.48	13.86	6.35	2.00	0.83
9200	18.89	14.07	6.42	2.03	0.85
9300	19.21	14.25	6.49	2.06	0.86
9400	19.45	14.40	6.53	2.07	0.87
9500	19.69	14.53	6.60	2.09	0.88
9600	19.93	14.70	6.67	2.12	0.90
9700	20.05	14.80	6.72	2.13	0.90
9800	20.22	14.94	6.80	2.17	0.92
9900	20.16	15.02	6.85	2.19	0.93
10000	20.11	15.05	6.87	2.20	0.94
10100	20.04	15.15	6.93	2.22	0.95
10200	19.89	15.17	6.99	2.23	0.95
10300	19.65	15.22	7.05	2.26	0.97
10400	19.27	15.16	7.07	2.27	0.97
10500	18.86	15.08	7.10	2.28	0.98
10600	18.48	15.00	7.11	2.30	0.99
10700	18.00	14.84	7.12	2.29	0.99
10800	17.57	14.72	7.12	2.30	1.00
10900	17.09	14.57	7.13	2.31	1.01
11000	16.54	14.31	7.11	2.30	1.00
11100	16.17	14.14	7.08	2.28	1.00
11200	15.73	13.95	7.07	2.28	1.00
11300	15.37	13.76	7.03	2.27	0.99
11400	14.98	13.55	6.99	2.27	1.00
11500	14.66	13.35	6.93	2.24	0.98
11600	14.40	13.21	6.88	2.23	0.98
11700	14.22	13.10	6.85	2.20	0.97
11800	14.04	13.03	6.83	2.20	0.97
11900	13.90	12.93	6.79	2.18	0.96
12000	13.78	12.87	6.75	2.17	0.96



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Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) vs Frequency @ 0V
6000	0.91
6100	0.89
6200	0.87
6300	0.86
6400	0.84
6500	0.82
6600	0.79
6700	0.77
6800	0.76
6900	0.74
7000	0.72
7100	0.71
7200	0.69
7300	0.68
7400	0.67
7500	0.66
7600	0.65
7700	0.65
7800	0.64
7900	0.64
8000	0.63
8100	0.63
8200	0.63
8300	0.63
8400	0.63
8500	0.64
8600	0.64
8700	0.64
8800	0.64
8900	0.65
9000	0.65
9100	0.66
9200	0.66
9300	0.67
9400	0.68
9500	0.69
9600	0.70
9700	0.72
9800	0.73
9900	0.75
10000	0.76
10100	0.78
10200	0.80
10300	0.81
10400	0.83
10500	0.85
10600	0.87
10700	0.88
10800	0.89
10900	0.91
11000	0.92
11100	0.93
11200	0.94
11300	0.94
11400	0.95
11500	0.95
11600	0.95
11700	0.95
11800	0.95
11900	0.94
12000	0.94

*Typical Performance Data*

Frequency (MHz)	Return Loss (dB) vs Frequency at 0V	
	Input	Output
6000	9.17	10.67
6100	9.26	10.89
6200	9.36	11.14
6300	9.44	11.41
6400	9.56	11.69
6500	9.69	12.02
6600	9.82	12.35
6700	9.99	12.71
6800	10.15	13.11
6900	10.34	13.49
7000	10.55	13.91
7100	10.77	14.37
7200	11.02	14.84
7300	11.26	15.30
7400	11.54	15.79
7500	11.87	16.23
7600	12.17	16.75
7700	12.53	17.23
7800	12.91	17.67
7900	13.27	18.11
8000	13.68	18.50
8100	14.12	18.94
8200	14.56	19.27
8300	14.99	19.56
8400	15.41	19.81
8500	15.90	19.99
8600	16.35	20.14
8700	16.80	20.31
8800	17.27	20.33
8900	17.66	20.27
9000	18.05	20.16
9100	18.48	20.04
9200	18.89	19.83
9300	19.21	19.53
9400	19.45	19.16
9500	19.69	18.70
9600	19.93	18.30
9700	20.05	17.80
9800	20.22	17.36
9900	20.16	16.85
10000	20.11	16.37
10100	20.04	15.93
10200	19.89	15.57
10300	19.65	15.14
10400	19.27	14.81
10500	18.86	14.44
10600	18.48	14.19
10700	18.00	14.00
10800	17.57	13.79
10900	17.09	13.65
11000	16.54	13.52
11100	16.17	13.45
11200	15.73	13.44
11300	15.37	13.47
11400	14.98	13.49
11500	14.66	13.57
11600	14.40	13.76
11700	14.22	13.95
11800	14.04	14.20
11900	13.90	14.46
12000	13.78	14.78



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## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) vs Freq over Temperature @ Vctrl=0V				
	T = -55°C	T = -25°C	T = 0°C	T = 25°C	T = 85°C
6000	0.74	0.78	0.85	0.89	0.94
6200	0.69	0.74	0.80	0.85	0.91
6400	0.63	0.69	0.75	0.80	0.86
6600	0.57	0.64	0.71	0.76	0.83
6800	0.52	0.59	0.66	0.72	0.78
7000	0.48	0.56	0.63	0.69	0.75
7200	0.47	0.54	0.60	0.66	0.72
7400	0.45	0.51	0.59	0.64	0.70
7600	0.43	0.50	0.57	0.62	0.68
7800	0.42	0.49	0.56	0.61	0.67
8000	0.42	0.49	0.56	0.61	0.67
8200	0.42	0.49	0.56	0.61	0.67
8400	0.42	0.49	0.56	0.61	0.68
8600	0.43	0.49	0.56	0.61	0.68
8800	0.43	0.50	0.57	0.62	0.69
9000	0.44	0.51	0.58	0.63	0.70
9200	0.46	0.52	0.60	0.64	0.71
9400	0.48	0.54	0.62	0.66	0.72
9600	0.50	0.56	0.64	0.68	0.74
9800	0.51	0.58	0.66	0.70	0.77
10000	0.55	0.60	0.68	0.74	0.80
10200	0.59	0.64	0.72	0.77	0.84
10400	0.63	0.67	0.76	0.81	0.88
10600	0.68	0.72	0.79	0.85	0.91
10800	0.74	0.76	0.84	0.88	0.95
11000	0.79	0.80	0.87	0.91	0.98
11200	0.84	0.84	0.90	0.94	0.99
11400	0.87	0.87	0.93	0.95	0.99
11600	0.88	0.89	0.94	0.96	0.99
11800	0.86	0.88	0.95	0.96	0.98
12000	0.85	0.87	0.94	0.96	0.98

## Typical Performance Data

Frequency (MHz)	Input Return Loss (dB) vs Freq over Temperature @ Vctrl=0V				
	T = -55°C	T = -25°C	T = 0°C	T = 25°C	T = 85°C
6000	10.71	10.90	10.86	10.91	10.89
6200	11.38	11.46	11.48	11.47	11.37
6400	12.12	12.16	12.16	12.18	12.02
6600	13.26	13.07	13.08	12.93	12.76
6800	14.68	14.28	14.27	13.90	13.73
7000	15.80	15.33	15.27	14.90	14.73
7200	16.69	16.26	16.33	16.04	15.92
7400	17.95	17.45	17.42	17.27	17.28
7600	19.29	18.80	18.87	18.58	18.71
7800	20.55	20.20	20.38	20.06	20.32
8000	20.73	20.74	21.15	21.34	21.60
8200	21.56	21.39	22.22	22.75	22.77
8400	22.35	22.12	23.03	24.00	23.81
8600	21.99	22.19	23.50	24.94	24.53
8800	22.15	22.36	23.56	25.55	25.49
9000	21.05	21.42	22.65	25.24	26.47
9200	20.03	20.40	21.49	24.47	26.96
9400	18.94	19.43	20.37	23.00	26.30
9600	18.27	18.77	19.36	21.25	24.26
9800	17.64	18.20	18.67	19.69	22.04
10000	16.36	17.08	17.39	18.13	19.61
10200	15.09	15.87	16.17	16.85	17.78
10400	14.28	15.10	15.38	15.77	16.48
10600	13.32	14.17	14.55	15.02	15.61
10800	12.39	13.40	13.87	14.39	15.00
11000	11.93	12.92	13.38	13.99	14.62
11200	11.38	12.47	13.07	13.87	14.85
11400	11.30	12.29	12.92	13.86	15.13
11600	11.43	12.43	13.07	14.19	16.06
11800	11.89	12.85	13.45	14.70	17.17
12000	12.56	13.37	13.98	15.50	18.47



## Typical Performance Data

Vctrl (V)	Attenuation (dB) vs Vctrl over Temperature @ 6 GHz				
	T = -55°C	T = -25°C	T = 0°C	T = 25°C	T = 85°C
0.00	0.00	0.00	0.00	0.00	0.00
0.05	0.00	0.00	0.00	0.00	0.01
0.10	0.00	0.01	0.00	0.00	0.01
0.15	0.00	0.01	0.00	0.00	0.03
0.20	0.00	0.01	0.00	0.00	0.08
0.25	0.00	0.02	0.00	0.01	0.18
0.30	0.01	0.02	0.01	0.02	0.41
0.35	0.00	0.02	0.02	0.05	0.88
0.40	0.01	0.03	0.04	0.15	1.83
0.45	0.01	0.04	0.12	0.40	3.59
0.50	0.02	0.10	0.34	1.04	6.51
0.55	0.04	0.27	0.94	2.46	10.45
0.60	0.13	0.81	2.42	5.26	14.99
0.65	0.48	2.30	5.53	9.70	19.25
0.70	1.70	5.82	10.66	15.26	22.36
0.75	5.08	11.56	16.64	20.19	23.95
0.80	11.42	18.03	21.48	23.20	24.62
0.85	18.64	22.60	23.90	24.43	24.90
0.90	23.26	24.41	24.71	24.85	25.02
0.95	24.63	24.90	24.97	25.01	25.08
1.00	24.96	25.05	25.06	25.07	25.10

## Typical Performance Data

Vctrl (V)	Attenuation (dB) vs Vctrl over Temperature @ 9 GHz				
	T = -55°C	T = -25°C	T = 0°C	T = 25°C	T = 85°C
0.00	0.00	0.00	0.00	0.00	0.00
0.05	0.00	0.00	0.00	0.00	0.01
0.10	0.00	0.01	0.00	0.00	0.01
0.15	0.00	0.01	0.00	0.00	0.03
0.20	0.00	0.02	0.00	0.00	0.08
0.25	0.01	0.02	0.00	0.00	0.18
0.30	0.01	0.02	0.01	0.01	0.39
0.35	0.01	0.02	0.01	0.05	0.84
0.40	0.01	0.03	0.04	0.14	1.76
0.45	0.01	0.05	0.11	0.38	3.45
0.50	0.02	0.10	0.32	0.99	6.24
0.55	0.04	0.26	0.89	2.36	10.00
0.60	0.12	0.77	2.30	5.04	14.19
0.65	0.46	2.18	5.26	9.26	17.82
0.70	1.61	5.53	10.15	14.42	20.06
0.75	4.81	10.96	15.57	18.53	21.00
0.80	10.80	16.74	19.40	20.56	21.31
0.85	17.23	20.13	20.89	21.22	21.42
0.90	20.53	21.15	21.28	21.39	21.46
0.95	21.25	21.36	21.37	21.44	21.48
1.00	21.37	21.40	21.40	21.45	21.50

## Typical Performance Data

Vctrl (V)	Attenuation (dB) vs Vctrl over Temperature @ 12 GHz				
	T = -55°C	T = -25°C	T = 0°C	T = 25°C	T = 85°C
0.00	0.00	0.00	0.00	0.00	0.00
0.05	0.00	0.01	0.00	0.00	0.00
0.10	0.00	0.01	0.00	0.00	0.02
0.15	0.00	0.02	0.00	0.00	0.04
0.20	0.00	0.02	0.00	0.00	0.09
0.25	0.01	0.02	0.00	0.00	0.21
0.30	0.01	0.02	0.01	0.02	0.46
0.35	0.01	0.03	0.02	0.06	1.00
0.40	0.01	0.03	0.05	0.17	2.07
0.45	0.01	0.05	0.13	0.46	4.00
0.50	0.02	0.12	0.39	1.18	7.09
0.55	0.05	0.33	1.09	2.79	11.04
0.60	0.16	0.96	2.79	5.83	15.19
0.65	0.59	2.70	6.20	10.38	18.41
0.70	2.04	6.61	11.48	15.52	20.13
0.75	5.89	12.46	16.79	19.10	20.73
0.80	12.45	18.03	20.01	20.59	20.91
0.85	18.61	20.73	21.03	20.98	20.95
0.90	21.18	21.39	21.24	21.06	20.96
0.95	21.61	21.49	21.28	21.08	20.97
1.00	21.67	21.50	21.29	21.08	20.97