

Amplifier

ZHL-0G72G7100(X)+

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (MHz)	Small Signal Gain (dB)			Return Loss In (dB)			Return Loss Out (dB)		
	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V
700	50.63	51.25	49.79	-14.54	-14.49	-14.37	-20.02	-19.76	-19.58
750	50.06	50.67	49.17	-14.22	-14.34	-14.08	-24.73	-23.51	-24.87
800	49.31	50.00	48.38	-14.19	-14.14	-13.99	-27.17	-31.53	-29.89
850	49.08	49.76	48.16	-14.23	-14.22	-14.08	-23.93	-25.57	-24.93
900	49.61	50.22	48.73	-14.60	-14.58	-14.45	-23.86	-23.59	-24.10
950	50.64	51.26	49.82	-15.27	-15.24	-15.16	-30.13	-27.53	-28.68
1000	51.12	51.65	50.37	-16.18	-16.03	-15.93	-24.53	-24.85	-25.41
1050	51.46	52.07	50.78	-17.31	-17.28	-17.06	-17.65	-17.84	-18.33
1100	51.44	52.08	50.80	-18.34	-18.25	-18.11	-16.22	-16.05	-16.79
1150	51.43	52.07	50.82	-19.24	-19.16	-18.97	-18.60	-19.08	-19.20
1200	50.82	51.48	50.26	-19.71	-19.67	-19.44	-28.25	-29.58	-29.02
1250	50.25	50.94	49.67	-20.09	-19.92	-19.75	-28.75	-26.19	-26.93
1300	50.51	51.15	49.89	-20.07	-19.99	-19.77	-21.16	-21.73	-20.60
1350	51.23	51.80	50.61	-20.45	-20.11	-20.07	-18.27	-19.40	-18.03
1400	51.46	52.15	50.79	-20.71	-20.45	-20.38	-17.63	-17.74	-17.59
1450	51.22	51.93	50.52	-21.40	-21.19	-21.14	-18.14	-18.24	-18.28
1500	50.96	51.61	50.25	-22.56	-22.30	-21.89	-19.85	-18.67	-20.08
1525	50.81	51.49	50.06	-23.07	-22.77	-22.50	-22.34	-20.41	-22.63
1550	50.62	51.34	49.85	-23.71	-23.38	-23.16	-28.14	-26.08	-28.59
1575	50.32	51.04	49.53	-24.30	-24.16	-23.73	-39.21	-34.40	-39.07
1600	49.99	50.66	49.20	-24.60	-24.37	-24.23	-23.30	-25.10	-23.31
1625	49.59	50.29	48.77	-25.17	-24.91	-24.50	-18.07	-18.05	-18.17
1650	49.22	49.92	48.40	-25.41	-25.65	-25.08	-15.15	-14.35	-15.28
1675	49.05	49.68	48.24	-25.67	-25.90	-25.18	-13.51	-12.94	-13.65
1700	49.09	49.63	48.30	-26.09	-25.87	-25.30	-12.72	-12.72	-12.84
1725	49.15	49.64	48.35	-25.98	-25.84	-25.32	-12.81	-12.76	-12.92
1750	49.12	49.70	48.35	-26.08	-25.96	-25.16	-13.84	-12.89	-13.91
1775	49.11	49.72	48.38	-25.83	-25.80	-25.22	-16.01	-15.54	-16.09
1800	49.07	49.67	48.35	-25.29	-25.65	-24.77	-19.30	-18.92	-19.46
1825	48.96	49.54	48.27	-25.11	-25.10	-24.39	-21.72	-20.84	-22.10
1850	48.83	49.39	48.14	-24.71	-24.42	-24.07	-19.73	-20.38	-19.99
1875	48.75	49.33	48.07	-24.31	-24.23	-23.80	-16.53	-17.03	-16.65
1900	48.74	49.29	48.02	-23.62	-23.87	-23.08	-13.88	-14.76	-13.97
1925	48.89	49.43	48.22	-22.57	-23.36	-22.46	-12.27	-13.21	-12.39
1950	49.64	50.03	49.03	-22.36	-22.55	-21.98	-12.50	-12.95	-12.63
2000	50.59	51.03	50.01	-22.03	-21.38	-21.02	-13.34	-13.34	-13.50
2050	50.92	51.43	50.33	-19.67	-19.89	-19.11	-17.02	-16.53	-17.27
2100	50.81	51.28	50.18	-18.73	-18.82	-18.67	-28.82	-25.31	-29.65
2150	50.77	51.31	50.16	-17.63	-18.26	-17.95	-19.97	-20.00	-19.62
2200	50.64	51.17	50.01	-17.90	-17.89	-17.96	-16.36	-16.47	-16.27
2250	50.74	51.13	50.05	-18.11	-18.07	-17.88	-16.19	-15.18	-16.12
2300	50.60	51.09	49.90	-18.30	-18.30	-18.35	-19.40	-18.66	-19.20
2350	50.22	50.76	49.50	-18.74	-18.70	-18.75	-23.05	-21.70	-21.80
2400	49.75	50.34	49.05	-18.77	-18.80	-18.75	-21.07	-21.90	-20.22
2450	49.25	49.65	48.45	-18.86	-19.03	-18.92	-27.02	-25.30	-25.38
2500	48.89	49.39	48.19	-19.04	-18.95	-19.07	-27.12	-32.41	-28.78
2550	48.91	49.45	48.22	-18.76	-18.89	-18.66	-21.57	-22.72	-22.83
2600	49.26	49.73	48.59	-18.24	-18.39	-18.29	-18.42	-17.86	-19.20
2650	49.65	49.95	49.05	-18.00	-18.06	-17.98	-16.92	-17.13	-17.60
2700	49.62	50.05	49.13	-17.58	-17.48	-17.81	-16.18	-16.12	-16.92

Amplifier

ZHL-0G72G7100(X)+

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (MHz)	Noise Figure (dB)			Power 1 dB Compression (dBm)			Power Saturation (dBm)		
	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V
700	7.74	7.71	7.76	49.94	50.26	49.81	50.58	50.96	50.59
750	7.64	7.61	7.62	50.10	50.36	50.01	50.53	50.73	50.40
800	7.55	7.54	7.57	50.12	50.33	49.99	50.39	50.54	50.18
850	7.53	7.53	7.57	50.16	50.36	49.98	50.34	50.50	50.13
900	7.51	7.53	7.49	50.63	50.84	50.50	50.82	51.00	50.66
950	7.46	7.45	7.46	51.37	51.71	51.50	51.72	52.02	51.82
1000	7.48	7.47	7.50	51.30	51.78	51.75	51.68	52.10	52.09
1050	7.36	7.35	7.38	50.66	51.23	51.21	51.10	51.62	51.64
1100	7.33	7.32	7.34	50.24	50.77	50.81	50.74	51.23	51.30
1150	7.28	7.27	7.28	49.72	50.36	50.36	50.30	50.86	50.90
1200	7.19	7.17	7.20	49.29	49.87	49.83	49.88	50.43	50.42
1250	7.13	7.12	7.16	49.27	49.70	49.71	49.90	50.31	50.36
1300	7.13	7.12	7.12	49.27	49.76	49.67	50.05	50.52	50.48
1350	7.10	7.13	7.12	49.54	50.05	49.96	50.42	50.91	50.87
1400	7.04	7.03	7.06	50.28	50.87	50.78	50.83	51.38	51.36
1450	7.00	6.99	6.99	50.81	51.34	51.23	51.33	51.87	51.84
1500	7.07	7.07	7.09	50.83	51.38	51.21	51.41	51.95	51.90
1525	7.06	7.07	7.10	50.77	51.32	51.13	51.40	51.94	51.89
1550	7.06	7.07	7.10	50.76	51.32	51.10	51.42	51.98	51.90
1575	7.12	7.11	7.15	50.80	51.32	51.11	51.46	51.97	51.92
1600	7.14	7.12	7.16	50.78	51.33	51.05	51.41	51.96	51.84
1625	7.17	7.18	7.21	50.73	51.29	50.98	51.36	51.89	51.73
1650	7.18	7.19	7.22	50.69	51.16	50.88	51.37	51.81	51.70
1675	7.26	7.25	7.28	50.67	51.18	50.86	51.38	51.86	51.70
1700	7.27	7.26	7.30	50.78	51.33	50.99	51.46	51.99	51.81
1725	7.30	7.29	7.30	50.66	51.17	50.87	51.44	51.93	51.75
1750	7.31	7.29	7.30	50.42	50.95	50.57	51.23	51.76	51.52
1775	7.28	7.27	7.28	50.21	50.83	50.39	51.02	51.62	51.37
1800	7.27	7.26	7.28	50.02	50.57	50.14	50.90	51.42	51.20
1825	7.34	7.33	7.37	49.74	50.29	49.86	50.72	51.26	50.97
1850	7.35	7.34	7.39	49.40	49.87	49.48	50.43	50.89	50.65
1875	7.31	7.31	7.35	49.08	49.46	49.13	50.17	50.57	50.38
1900	7.31	7.30	7.34	48.94	49.29	48.99	50.20	50.57	50.39
1925	7.33	7.34	7.35	48.34	48.61	48.28	49.75	50.14	49.96
1950	7.33	7.35	7.35	48.29	48.55	48.27	49.78	50.18	50.06
2000	7.24	7.23	7.24	48.41	48.96	48.43	49.99	50.66	50.34
2050	7.34	7.31	7.35	48.73	49.41	48.85	50.27	51.00	50.62
2100	7.47	7.44	7.51	49.22	49.47	49.35	50.53	50.86	50.79
2150	7.47	7.45	7.48	48.90	49.26	49.08	49.99	50.49	50.26
2200	7.37	7.39	7.38	49.28	49.61	49.36	50.39	50.81	50.57
2250	7.51	7.49	7.51	49.11	49.40	49.12	50.39	50.80	50.44
2300	7.44	7.43	7.47	49.20	49.82	49.17	50.55	51.15	50.57
2350	7.58	7.55	7.59	49.64	49.98	49.61	50.71	51.13	50.73
2400	7.61	7.57	7.61	49.45	49.82	49.43	50.44	50.90	50.47
2450	7.58	7.60	7.57	49.17	49.53	49.11	50.23	50.64	50.17
2500	7.59	7.56	7.60	48.78	49.07	48.73	50.04	50.43	49.93
2550	7.71	7.65	7.68	48.53	48.84	48.48	50.13	50.50	50.03
2600	7.74	7.69	7.72	48.81	49.13	48.86	50.51	50.87	50.47
2650	7.75	7.76	7.77	49.40	49.67	49.44	50.82	51.20	50.92
2700	7.77	7.71	7.77	48.93	49.27	49.22	50.12	50.52	50.47

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (MHz)	Harmonics (F2) (dBc)			Harmonics (F3) (dBc)		
	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V
700	-21.18	-22.90	-23.47	-32.14	-32.05	-34.72
750	-21.05	-22.44	-23.11	-31.96	-31.83	-34.45
800	-18.43	-19.34	-20.18	-31.59	-31.41	-35.02
850	-17.30	-18.02	-19.04	-27.33	-26.71	-29.28
900	-18.85	-19.81	-20.18	-28.10	-27.52	-28.63
950	-23.03	-24.54	-24.70	-31.65	-30.44	-30.91
1000	-22.38	-23.92	-23.97	-36.83	-35.83	-36.03
1050	-19.92	-21.14	-21.30	-39.31	-39.62	-40.04
1100	-15.50	-16.51	-16.74	-41.78	-43.26	-43.58
1150	-12.86	-14.25	-14.61	-48.80	-52.62	-52.69
1200	-9.86	-11.58	-12.16	-43.66	-49.39	-49.79
1250	-6.88	-9.98	-10.41	-43.16	-47.53	-47.09
1300	-7.15	-10.09	-10.45	-48.77	-52.70	-54.45
1350	-9.03	-10.69	-11.20	-63.63	-62.57	-61.35
1400	-10.81	-11.84	-12.16	-63.22	-62.67	-61.72
1450	-13.84	-14.50	-14.67	-65.49	-65.73	-66.25
1500	-17.35	-17.91	-18.06	-45.78	-47.29	-48.58
1525	-19.04	-19.62	-19.81	-52.61	-53.78	-54.48
1550	-20.34	-20.91	-21.08	-59.48	-60.24	-61.86
1575	-21.90	-22.46	-22.61	-50.71	-51.58	-52.99
1600	-23.14	-23.71	-23.85	-49.48	-50.95	-52.67
1625	-24.49	-25.10	-25.28	-50.03	-51.60	-53.48
1650	-25.82	-26.48	-26.68	-48.17	-49.79	-51.17
1675	-25.76	-26.55	-26.84	-40.67	-41.98	-43.25
1700	-26.28	-27.16	-27.47	-36.62	-37.82	-38.84
1725	-25.47	-26.43	-26.86	-34.45	-35.78	-36.82
1750	-24.08	-25.12	-25.57	-35.51	-35.79	-36.18
1775	-23.55	-24.57	-25.04	-35.92	-36.62	-37.33
1800	-22.35	-23.29	-23.81	-39.18	-40.76	-42.16
1825	-21.78	-22.94	-23.40	-42.53	-44.10	-45.24
1850	-22.07	-23.41	-24.24	-41.37	-43.08	-44.20
1875	-22.84	-24.09	-24.65	-46.36	-48.13	-49.54
1900	-24.29	-25.07	-25.69	-46.02	-47.38	-48.18
1925	-28.80	-29.24	-29.95	-44.72	-45.27	-47.35
1950	-35.44	-36.05	-36.80	-44.93	-45.76	-46.99
2000	-43.83	-44.62	-44.80	-45.06	-47.82	-48.97
2050	-51.25	-51.67	-52.04	-52.33	-54.45	-55.21
2100	-62.26	-62.44	-62.35	-43.59	-45.70	-46.49
2150	-53.65	-55.68	-56.73	-45.38	-47.88	-49.33
2200	-54.25	-54.18	-54.15	-41.62	-43.71	-44.92
2250	-39.60	-41.08	-41.57	-49.83	-51.34	-51.97
2300	-48.97	-49.99	-50.30	-46.67	-47.98	-48.66
2350	-57.70	-60.11	-61.97	-46.67	-47.74	-48.25
2400	-44.47	-45.52	-45.71	-45.49	-46.35	-46.75
2450	-40.22	-41.31	-41.62	-44.31	-44.89	-45.22
2500	-33.39	-34.70	-35.12	-41.28	-41.95	-42.20
2550	-29.38	-30.80	-31.23	-50.66	-51.30	-51.66
2600	-28.24	-29.82	-30.37	-55.42	-55.83	-55.83
2650	-27.08	-28.38	-28.87	-47.40	-49.65	-49.98
2700	-35.93	-37.35	-37.98	-43.44	-44.77	-44.86

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (MHz)	2nd Order Intercept Point (dBm)			3rd Order Intercept Point (dBm)		
	+28 V	+30 V	+31 V	+28 V	+30 V	+31 V
700	59.85	60.82	61.53	55.55	55.75	55.81
750	60.77	61.57	62.37	55.59	55.80	55.86
800	59.61	60.34	61.12	55.45	55.66	55.69
850	60.21	61.08	61.76	55.32	55.57	55.59
900	61.68	62.81	63.46	55.48	55.75	55.81
950	64.22	65.98	66.69	55.94	56.28	56.33
1000	63.96	65.71	66.50	55.90	56.32	56.46
1050	62.81	63.86	64.55	55.13	55.58	55.69
1100	58.20	58.99	59.61	54.95	55.44	55.51
1150	56.13	57.02	57.68	54.62	55.08	55.13
1200	53.65	54.31	55.05	53.65	54.28	54.39
1250	52.03	52.79	53.45	52.03	52.79	53.45
1300	51.93	52.70	53.39	51.93	52.70	53.39
1350	52.48	53.34	53.98	52.48	53.34	53.98
1400	52.82	53.58	54.22	52.82	53.58	54.22
1450	55.35	55.99	56.55	55.35	55.99	56.05
1500	59.06	59.75	60.20	55.95	56.56	56.43
1525	61.09	61.78	62.27	56.08	56.66	56.56
1550	62.77	63.47	63.95	56.19	56.77	56.64
1575	64.28	64.95	65.47	56.27	56.77	56.72
1600	65.49	66.21	66.74	56.28	56.74	56.72
1625	66.57	67.34	67.89	56.18	56.64	56.60
1650	67.29	68.08	68.73	56.07	56.48	56.49
1675	67.03	67.86	68.55	56.05	56.45	56.48
1700	67.57	68.52	69.18	56.31	56.73	56.74
1725	66.68	67.51	68.36	56.31	56.59	56.71
1750	65.59	66.51	67.31	56.13	56.45	56.56
1775	64.86	65.82	66.55	55.86	56.19	56.27
1800	64.46	65.23	66.17	55.50	55.82	56.02
1825	65.00	65.89	66.69	55.23	55.59	55.67
1850	65.41	66.27	67.16	54.98	55.32	55.46
1875	65.25	65.84	66.84	54.85	55.21	55.25
1900	66.45	67.04	67.80	54.69	54.96	55.09
1925	70.40	70.83	71.84	54.29	54.58	54.74
1950	76.32	76.94	77.85	54.70	55.04	55.13
2000	85.43	86.69	86.37	55.05	55.31	55.49
2050	92.23	93.26	93.16	55.35	55.67	55.79
2100	112.87	113.18	113.23	55.33	55.56	55.75
2150	102.25	104.48	105.35	54.84	54.95	55.20
2200	98.56	97.54	99.65	55.24	55.45	55.61
2250	81.94	83.39	84.07	55.49	55.67	55.88
2300	90.60	92.12	92.22	55.67	55.84	56.06
2350	99.94	101.22	102.75	55.71	55.84	56.09
2400	88.56	89.64	90.63	55.40	55.56	55.82
2450	82.99	84.24	85.13	55.49	55.66	55.96
2500	75.91	77.19	78.23	55.44	55.69	55.97
2550	71.24	72.89	73.69	55.60	55.82	56.07
2600	69.77	71.30	72.20	55.76	56.00	56.23
2650	69.24	70.42	71.32	55.61	55.86	56.09
2700	77.42	78.74	79.52	54.59	54.97	55.15