

# Amplifier

# ZX60-272LN-S+

## Typical Performance Data

**NOTE: Use PDF Bookmarks to view DATA at required conditions  
or to view GRAPHS.**

**Definitions:**

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: I = 50mA, Vd = 5V @Temperature = +25degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
2300	14.47	21.58	17.41	11.85	1.24	0.42	31.83	18.24	0.74
2310	14.44	21.53	17.62	11.86	1.24	0.43	31.05	18.27	0.73
2320	14.41	21.50	17.87	11.85	1.24	0.43	31.42	18.29	0.69
2330	14.38	21.46	18.11	11.85	1.24	0.43	31.65	18.19	0.66
2340	14.35	21.43	18.36	11.83	1.25	0.43	31.78	18.06	0.69
2350	14.33	21.39	18.61	11.83	1.25	0.43	32.12	18.07	0.69
2360	14.30	21.37	18.84	11.83	1.25	0.43	32.10	18.05	0.70
2370	14.27	21.32	19.10	11.85	1.25	0.43	31.70	18.22	0.72
2380	14.25	21.26	19.37	11.90	1.25	0.43	30.83	18.26	0.72
2390	14.22	21.25	19.63	11.98	1.25	0.43	30.70	18.25	0.71
2400	14.19	21.20	19.90	12.03	1.25	0.43	31.89	18.24	0.74
2410	14.17	21.19	20.18	12.08	1.25	0.43	33.03	18.24	0.75
2420	14.14	21.14	20.48	12.11	1.25	0.43	32.98	18.24	0.74
2430	14.12	21.10	20.84	12.15	1.25	0.43	31.05	18.23	0.67
2440	14.09	21.05	21.18	12.15	1.25	0.44	29.71	18.31	0.76
2450	14.06	21.04	21.55	12.16	1.25	0.44	29.37	18.32	0.74
2460	14.04	21.01	21.92	12.15	1.25	0.44	30.51	18.34	0.82
2470	14.01	20.95	22.31	12.19	1.25	0.44	32.70	18.33	0.67
2480	13.98	20.93	22.65	12.23	1.25	0.44	34.00	18.36	0.71
2490	13.96	20.92	22.99	12.31	1.26	0.44	31.25	18.36	0.73
2500	13.93	20.86	23.36	12.38	1.26	0.44	30.84	18.44	0.77
2510	13.90	20.83	23.65	12.46	1.26	0.44	30.96	18.49	0.78
2520	13.88	20.79	24.00	12.55	1.26	0.44	30.31	18.55	0.80
2530	13.85	20.77	24.33	12.60	1.26	0.44	31.76	18.59	0.77
2540	13.82	20.72	24.69	12.67	1.26	0.44	30.79	18.54	0.83
2550	13.80	20.70	25.01	12.70	1.26	0.44	31.20	18.68	0.79
2560	13.77	20.66	25.34	12.74	1.26	0.44	31.57	18.66	0.79
2570	13.74	20.63	25.54	12.76	1.26	0.44	30.44	18.68	0.76
2580	13.71	20.60	25.69	12.81	1.26	0.44	31.01	18.72	0.75
2590	13.68	20.57	25.83	12.88	1.26	0.44	31.14	18.72	0.73
2600	13.65	20.55	25.83	12.97	1.26	0.44	31.36	18.79	0.81
2610	13.63	20.52	25.72	13.09	1.26	0.44	31.66	18.75	0.83
2620	13.60	20.48	25.48	13.21	1.26	0.44	31.41	18.85	0.76
2630	13.58	20.46	25.13	13.32	1.26	0.44	30.80	18.83	0.77
2640	13.55	20.41	24.71	13.41	1.26	0.44	30.90	18.90	0.75
2660	13.48	20.36	23.96	13.57	1.27	0.44	30.98	19.05	0.76
2680	13.43	20.32	23.21	13.67	1.27	0.44	30.29	19.14	0.80
2700	13.36	20.28	22.31	13.85	1.27	0.44	31.47	19.24	0.75



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## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: I = 49mA, Vd = 5V @Temperature = -40degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
2300	14.79	21.40	17.50	11.77	1.20	0.45	33.41	18.07	0.49
2310	14.77	21.39	17.75	11.77	1.20	0.45	33.46	18.11	0.47
2320	14.73	21.34	17.96	11.77	1.20	0.45	31.24	18.10	0.42
2330	14.71	21.32	18.19	11.79	1.20	0.45	33.55	17.93	0.42
2340	14.68	21.27	18.42	11.80	1.20	0.45	33.37	17.81	0.42
2350	14.65	21.24	18.69	11.80	1.20	0.45	33.33	17.83	0.45
2360	14.62	21.18	18.86	11.83	1.20	0.46	32.93	17.86	0.44
2370	14.60	21.17	19.15	11.82	1.20	0.46	32.11	18.07	0.44
2380	14.57	21.10	19.36	11.83	1.20	0.46	31.65	18.11	0.44
2390	14.54	21.12	19.67	11.82	1.21	0.46	31.74	18.09	0.43
2400	14.51	21.04	19.97	11.82	1.20	0.46	32.24	18.03	0.48
2410	14.48	21.05	20.30	11.83	1.21	0.46	33.12	18.02	0.51
2420	14.46	21.00	20.64	11.86	1.21	0.46	34.72	18.03	0.49
2430	14.43	20.95	21.00	11.88	1.21	0.46	32.65	18.04	0.41
2440	14.40	20.91	21.33	11.91	1.21	0.46	31.11	18.13	0.48
2450	14.37	20.87	21.71	11.94	1.21	0.46	30.75	18.15	0.46
2460	14.35	20.86	22.04	11.97	1.21	0.46	32.36	18.17	0.53
2470	14.32	20.82	22.42	12.00	1.21	0.46	33.37	18.16	0.40
2480	14.30	20.75	22.79	12.00	1.21	0.47	34.54	18.17	0.43
2490	14.27	20.74	23.20	12.02	1.21	0.46	33.23	18.18	0.46
2500	14.24	20.72	23.64	12.05	1.21	0.47	31.66	18.30	0.51
2510	14.21	20.65	24.15	12.07	1.21	0.47	31.12	18.36	0.50
2520	14.18	20.64	24.73	12.10	1.21	0.47	31.24	18.38	0.50
2530	14.15	20.62	25.17	12.12	1.21	0.47	32.85	18.41	0.51
2540	14.12	20.59	25.76	12.18	1.22	0.47	33.41	18.39	0.54
2550	14.10	20.54	26.17	12.22	1.21	0.47	31.71	18.51	0.49
2560	14.07	20.51	26.68	12.30	1.22	0.47	31.44	18.49	0.52
2570	14.05	20.46	27.10	12.36	1.21	0.47	32.19	18.53	0.48
2580	14.02	20.44	27.53	12.44	1.22	0.47	32.10	18.54	0.48
2590	13.99	20.41	27.85	12.47	1.22	0.47	32.66	18.59	0.46
2600	13.97	20.37	28.28	12.53	1.22	0.47	32.43	18.66	0.52
2610	13.94	20.35	28.56	12.55	1.22	0.47	31.75	18.67	0.51
2620	13.91	20.31	28.71	12.60	1.22	0.47	32.57	18.82	0.49
2630	13.88	20.30	28.77	12.68	1.22	0.47	33.98	18.83	0.49
2640	13.85	20.25	28.56	12.73	1.22	0.47	32.92	18.96	0.44
2660	13.80	20.19	27.52	12.93	1.22	0.47	31.22	18.93	0.45
2680	13.75	20.14	26.20	13.15	1.22	0.47	31.91	18.97	0.52
2690	13.72	20.09	25.43	13.25	1.22	0.47	32.45	19.08	0.49
2700	13.69	20.08	24.88	13.36	1.22	0.47	31.67	19.21	0.48



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## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: I = 52mA, Vd = 5V @Temperature = +85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP3 Output	1dB Comp. Output	Noise Figure
					K	Delta			
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Delta	(dBm)	(dBm)	(dB)
2300	14.25	21.69	16.93	11.84	1.27	0.40	31.75	18.36	0.97
2310	14.22	21.64	17.16	11.85	1.27	0.41	31.28	18.38	0.96
2320	14.19	21.61	17.36	11.88	1.27	0.41	29.58	18.39	0.94
2330	14.17	21.58	17.56	11.90	1.27	0.41	30.90	18.37	0.93
2340	14.14	21.53	17.76	11.92	1.27	0.41	31.35	18.25	0.93
2350	14.11	21.51	17.99	11.93	1.27	0.41	31.55	18.27	0.92
2360	14.09	21.49	18.17	11.95	1.28	0.41	30.62	18.22	0.96
2370	14.06	21.43	18.43	11.97	1.28	0.41	30.02	18.35	0.93
2380	14.03	21.39	18.67	11.99	1.28	0.41	29.82	18.36	0.97
2390	14.01	21.35	18.97	12.02	1.28	0.41	30.33	18.33	0.94
2400	13.98	21.34	19.28	12.04	1.28	0.41	31.10	18.38	0.96
2410	13.95	21.29	19.58	12.06	1.28	0.41	32.12	18.38	1.02
2420	13.93	21.26	19.88	12.10	1.28	0.41	32.03	18.39	0.99
2430	13.90	21.21	20.21	12.14	1.28	0.42	30.18	18.34	0.94
2440	13.88	21.19	20.51	12.18	1.28	0.42	29.53	18.41	1.02
2450	13.85	21.17	20.82	12.23	1.28	0.42	29.17	18.42	0.98
2460	13.83	21.13	21.10	12.28	1.28	0.42	29.99	18.44	1.06
2470	13.80	21.09	21.41	12.34	1.28	0.42	31.23	18.44	0.91
2480	13.77	21.06	21.72	12.39	1.29	0.42	32.18	18.46	0.96
2490	13.74	21.01	22.02	12.41	1.28	0.42	30.84	18.48	0.95
2500	13.72	20.96	22.34	12.47	1.28	0.42	29.69	18.50	1.01
2510	13.69	20.93	22.71	12.51	1.28	0.42	29.31	18.54	1.01
2520	13.66	20.92	23.05	12.57	1.29	0.42	30.48	18.55	1.04
2530	13.63	20.88	23.33	12.61	1.29	0.42	31.15	18.63	1.04
2540	13.60	20.86	23.64	12.69	1.29	0.42	30.60	18.57	1.06
2550	13.58	20.81	23.78	12.74	1.29	0.42	29.84	18.71	1.06
2560	13.55	20.79	23.95	12.82	1.29	0.42	29.86	18.71	1.03
2570	13.52	20.75	24.02	12.92	1.29	0.42	30.26	18.70	1.04
2580	13.50	20.73	24.09	13.00	1.29	0.42	30.65	18.80	1.01
2590	13.47	20.69	24.08	13.06	1.29	0.42	30.37	18.77	0.97
2600	13.44	20.66	24.06	13.15	1.29	0.42	31.06	18.83	1.06
2610	13.41	20.63	23.99	13.20	1.29	0.42	30.14	18.78	1.05
2620	13.39	20.60	23.85	13.26	1.29	0.42	30.94	18.82	0.97
2630	13.35	20.57	23.69	13.34	1.29	0.42	30.37	18.81	1.04
2640	13.32	20.55	23.45	13.41	1.30	0.42	29.96	18.82	1.02
2660	13.27	20.49	22.78	13.61	1.30	0.42	29.88	19.04	1.00
2680	13.21	20.43	22.05	13.82	1.30	0.42	29.93	19.20	1.08
2690	13.18	20.41	21.60	13.93	1.30	0.42	30.20	19.13	1.02
2700	13.14	20.41	21.23	14.05	1.30	0.42	29.97	19.21	1.02



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