

Coaxial Low Noise Amplifier

ZX60-33LN+

50Ω 50 to 3000 MHz

Features

- wide bandwidth, 50 to 3000 MHz
- low noise figure 1.1 dB typ.
- output power, up to 17.5 dBm typ.
- protected by US patent 6,790,049

Applications

- front-end amplifier
- cellular
- GPS
- bluetooth
- lab
- instrumentation
- test equipment



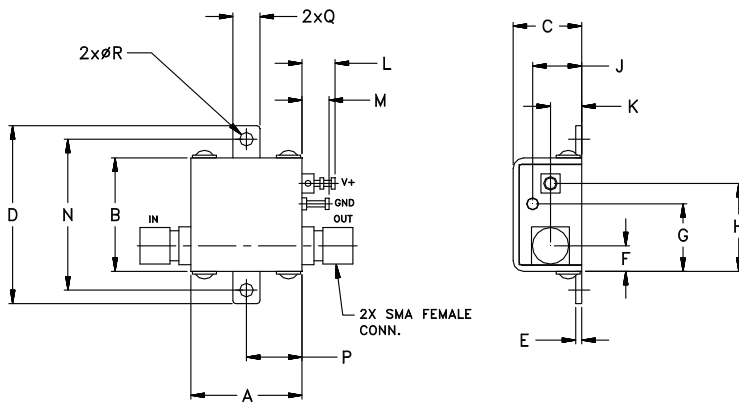
Case Style: GC957			
Connectors	Model	Price	Qty.
SMA	ZX60-33LN-S+	\$79.95 ea.	(1-9)

+RoHS Compliant
 The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

Parameter	Condition(MHz)	Min	Typ.	Max.	Units
Frequency	—	50	—	3000	MHz
Noise Figure	—	—	1.1	1.9	dB
Gain	100	—	21.9	—	dB
	1000	—	18.8	—	
	2000	13	14.5	—	
	3000	—	11.9	—	
Gain Flatness	—	—	—	—	dB
Output Power at 1dB compression	—	14.5	16.5	—	dBm
Output third order intercept point	—	—	+32	—	dBm
Input VSWR	—	—	2.0	—	:1
Output VSWR	—	—	1.6	—	:1
Active Directivity	—	—	—	—	dB
DC Supply Voltage	—	—	5	—	V
Supply Current	—	—	70	80	mA

Outline Drawing



Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C Case
Storage Temperature	-55°C to 100°C
DC Voltage	5.5 V
Input RF Power (no damage)	+13 dBm
Power Dissipation	0.44W

Permanent damage may occur if any of these limits are exceeded.

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
.74	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	.37	.18	.106	grams
18.80	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	4.57	25.40	9.40	4.57	2.69	23.0

Notes

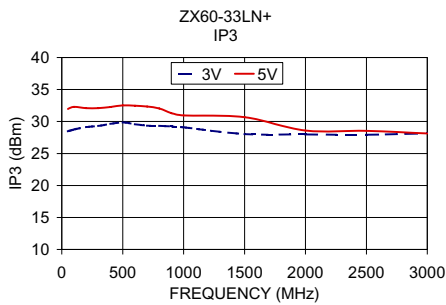
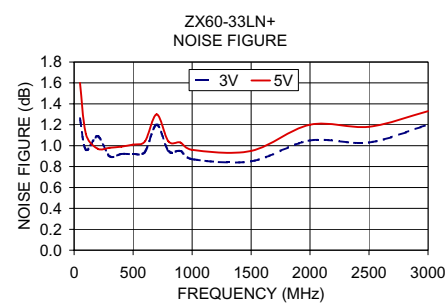
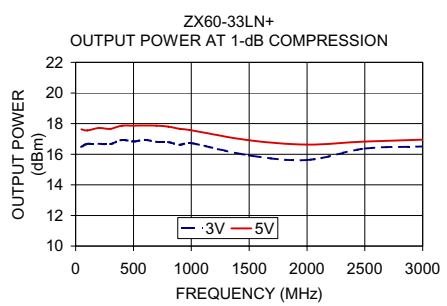
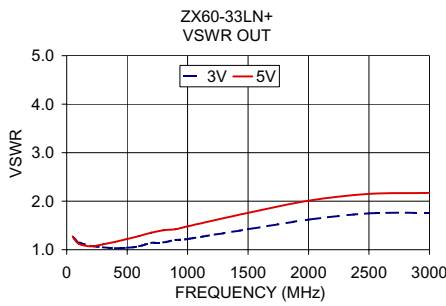
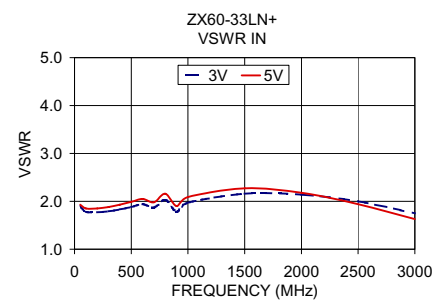
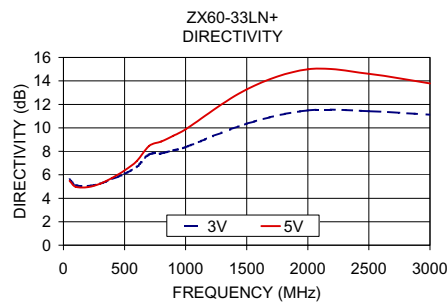
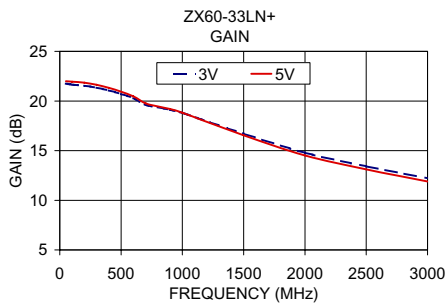
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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FREQUENCY (MHz)	GAIN (dB)		DIRECTIVITY (dB)		VSWR IN (:1)		VSWR OUT (:1)		NOISE FIGURE (dB)		POUT at 1dB COMPR. (dBm)		IP3 (dBm)	
	3V	5V	3V	5V	3V	5V	3V	5V	3V	5V	3V	5V	3V	5V
50.00	21.75	21.99	5.60	5.48	1.89	1.93	1.26	1.27	1.26	1.60	16.47	17.63	28.47	31.95
100.00	21.65	21.94	5.12	4.98	1.78	1.85	1.15	1.12	0.96	1.11	16.67	17.55	28.75	32.29
200.00	21.54	21.84	5.05	4.95	1.77	1.85	1.08	1.07	1.09	0.97	16.68	17.71	29.11	32.08
300.00	21.34	21.63	5.24	5.24	1.79	1.88	1.05	1.11	0.90	0.98	16.66	17.66	29.31	32.09
400.00	21.06	21.32	5.64	5.74	1.83	1.93	1.03	1.16	0.92	0.99	16.93	17.86	29.63	32.27
500.00	20.71	20.94	6.09	6.37	1.88	1.99	1.04	1.22	0.92	1.01	16.83	17.87	29.86	32.51
600.00	20.28	20.47	6.67	7.17	1.94	2.05	1.07	1.28	0.94	1.04	16.94	17.88	29.59	32.48
700.00	19.61	19.76	7.73	8.45	1.87	1.98	1.14	1.35	1.20	1.30	16.80	17.87	29.35	32.33
800.00	19.37	19.46	7.82	8.83	2.03	2.16	1.15	1.40	0.95	1.04	16.79	17.80	29.32	32.03
900.00	19.11	19.19	8.08	9.32	1.78	1.90	1.20	1.42	0.95	1.03	16.61	17.66	29.23	31.29
1000.00	18.80	18.82	8.35	9.88	1.97	2.09	1.22	1.48	0.87	0.96	16.72	17.56	29.10	30.95
1500.00	16.71	16.54	10.35	13.28	2.16	2.27	1.42	1.76	0.85	0.95	15.92	16.91	28.04	30.66
2000.00	14.79	14.51	11.49	14.99	2.14	2.18	1.62	2.01	1.05	1.20	15.62	16.63	27.99	28.58
2500.00	13.42	13.11	11.42	14.60	2.00	1.94	1.75	2.15	1.03	1.18	16.37	16.83	27.92	28.55
3000.00	12.22	11.90	11.12	13.78	1.75	1.63	1.76	2.17	1.20	1.33	16.50	16.95	28.16	28.14



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