Ultra Low Noise

Amplifier

ZX60-1614LN

50Ω 1217 MHz to 1620 MHz

Features

- Ultra low noise figure 0.5 typ.
- 11V-13V operation
- Good IP3, +30 dBm typ.
- Reverse voltage connection protected
- Small size
- Low cost
- Protected by US patent 6,790,049

CASE STYLE: GA955

Connectors	Model	Price	Qty.
SMA	ZX60-1614LN-S	$149.95 ea.	(1-9)

Applications

- Low noise amplifier RF front end
- Low noise pre-amp
- Buffer amplifier
- LNA for dual GPS application, 1227MHz and 1559MHz
- General purpose small signal
- Lab
- Instrumentation
- Test equipment

Electrical Specifications at T_{AMB} = 25°C

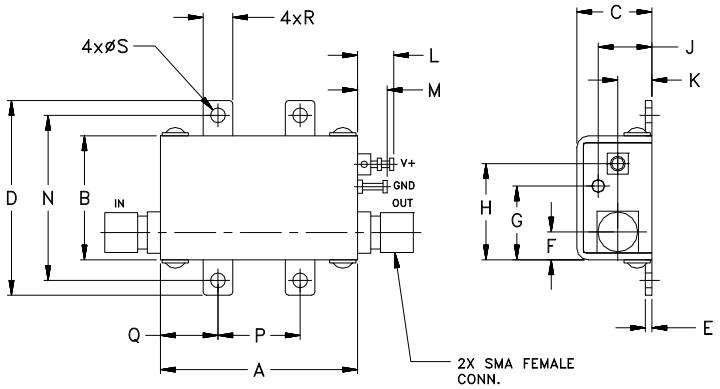
MODEL NO.	FREQ. (MHz)	GAIN (dB)				MAXIMUM POWER (dBm)	DYNAMIC RANGE			VSWR (:1) Typ.		ACTIVE DIRECTIVITY (dB) Isolation-Gain	DC VOLTAGE @ Pin V+ (V)	DC OPERATING CURRENT @ Pin V+ (mA)	
				Flatness		Output (1 dB Comp.)	NF (dB)		IP3 (dBm)						
	f_L- f_U	Typ.	Min.	Typ.	Max.	Typ.	Typ.	Max	Typ.	In	Out	Typ.		Typ.	Max.
ZX60-1614LN	1217-1620	14	11	±1.1	±2.0	13.5	0.5	0.9	30	1.3	1.3	11.5	12	42	50

Maximum Ratings

Operating Temperature	-40°C to 80°C case
Storage Temperature	-55°C to 100°C
DC Voltage	15V
Input Power(no Damage)	13dBm

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

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt.
1.20	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0

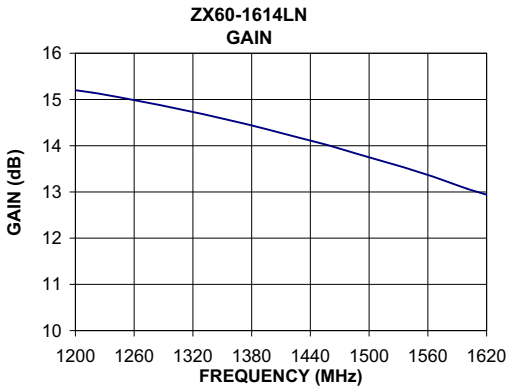
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

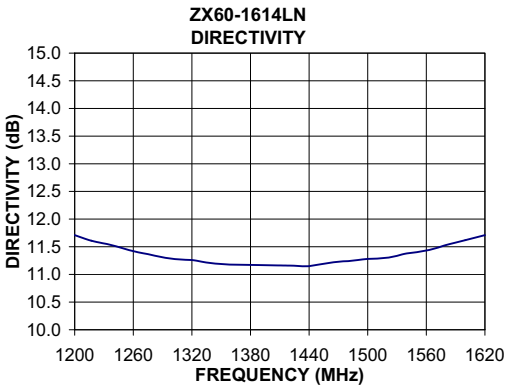
REV. OR
M99053
EDB040505
ZX60-1614LN
BLUEC
090910

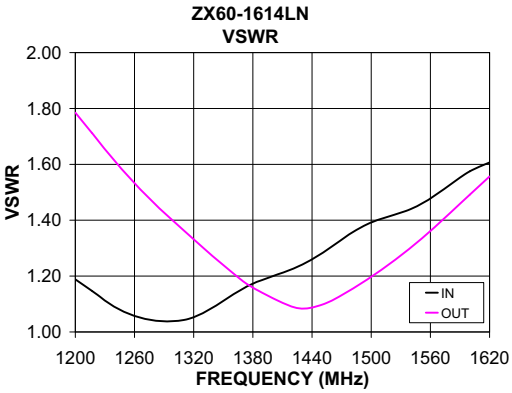
Typical Performance Data & Curves at 25°C

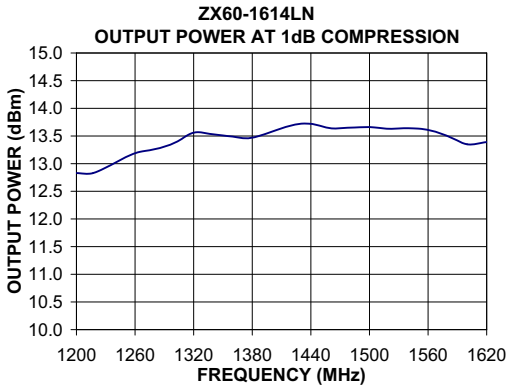
ZX60-1614LN

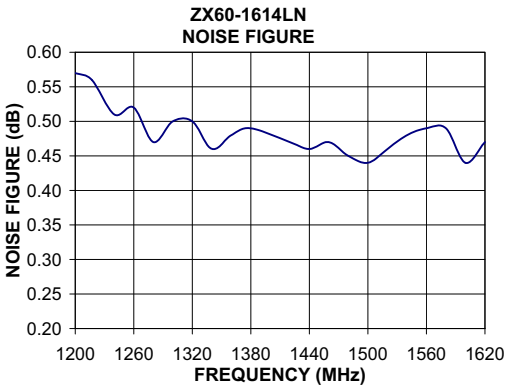
FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1dB COMPRESSION (dBm)	IP3 (dBm)	NF (dB)
1217	15.15	11.61	1.15	1.71	12.83	28.05	0.56
1240	15.07	11.52	1.09	1.61	13.02	28.46	0.51
1260	14.99	11.42	1.06	1.53	13.19	28.60	0.52
1280	14.90	11.35	1.04	1.46	13.26	28.81	0.47
1300	14.82	11.28	1.04	1.40	13.37	29.45	0.50
1320	14.73	11.26	1.05	1.33	13.56	29.89	0.50
1340	14.64	11.20	1.09	1.27	13.53	30.29	0.46
1360	14.54	11.18	1.13	1.21	13.49	30.39	0.48
1380	14.44	11.17	1.17	1.16	13.47	30.48	0.49
1420	14.22	11.16	1.23	1.09	13.69	31.44	0.47
1440	14.11	11.15	1.26	1.09	13.72	31.57	0.46
1460	14.00	11.21	1.31	1.11	13.64	31.66	0.47
1480	13.87	11.24	1.35	1.15	13.65	31.31	0.45
1500	13.75	11.28	1.39	1.20	13.66	31.52	0.44
1520	13.63	11.30	1.42	1.25	13.63	31.61	0.46
1540	13.50	11.38	1.44	1.30	13.64	31.47	0.48
1560	13.37	11.43	1.48	1.36	13.61	31.15	0.49
1580	13.22	11.53	1.53	1.43	13.50	30.74	0.49
1600	13.07	11.62	1.58	1.49	13.35	30.79	0.44
1620	12.94	11.71	1.61	1.56	13.39	30.90	0.47

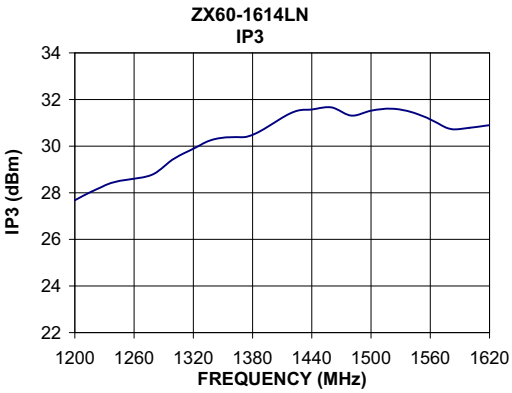












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