

Plug-In

# Low Noise Amplifier

TO-0812LN+

50Ω

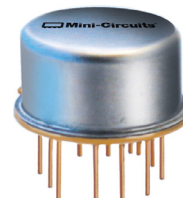
800 to 1200 MHz

## Features

- very low noise, 1.2 dB max.
- ideal for printed circuit design
- excellent gain flatness
- hermetic, TO-8 can

## Applications

- military, hi-rel applications
- communication systems
- UHF
- cellular



CASE STYLE: QQ96  
PRICE: \$203.50 ea. Qty. (1-9)

### +RoHS Compliant

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

## Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)		MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Max.		DC POWER	
	$f_L$	$f_U$		Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Input (no damage)		In	Out	Volt (V) Nom.	Current (mA) Max.
TO-0812LN+	800	1200	1.2	20	±1.0	+8	+10	+22.5	2.5	2.5	15	70

Noise Figure specified at room temperature, increases to 1.6dB typical at +85°C

Open load is not recommended, potentially can cause damage.

With no load derate max power input power by 20 dB.

## Pin Connections

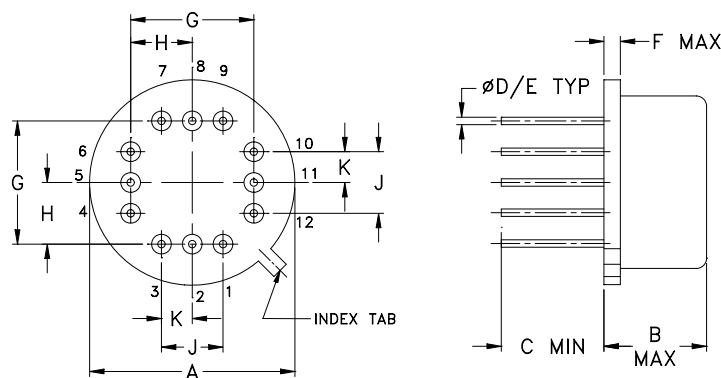
RF IN	5
RF OUT	11
DC	2
GROUND	1,3,4,6,7,8,9,10,12
CASE GROUND	1,3,4,6,7,8,9,10,12

## Maximum Ratings

Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+17V Max.

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	wt
.600	.250	.25	.016	.020	.04	.400	.200	.200	.100	grams
15.24	6.35	6.35	0.41	0.51	1.02	10.16	5.08	5.08	2.54	4.0

## Notes

A. 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.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document 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](http://www.minicircuits.com/MCLStore/terms.jsp)



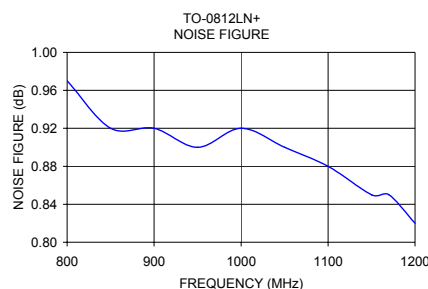
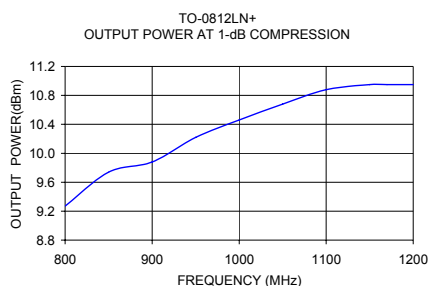
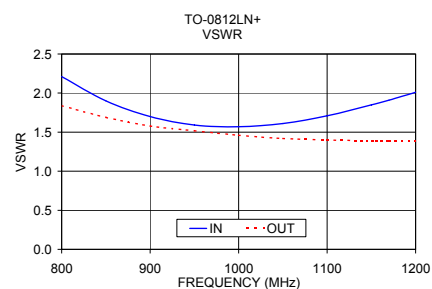
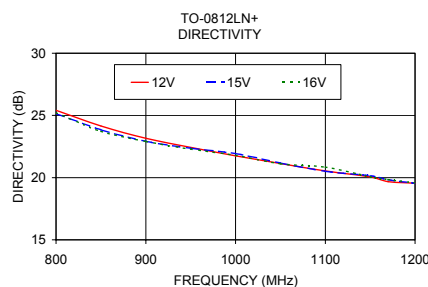
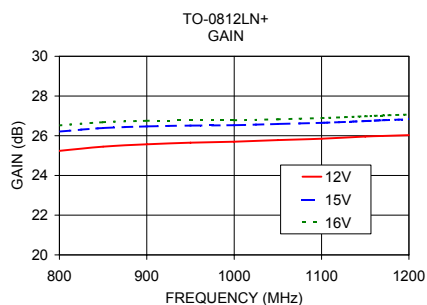
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. B  
M113397  
TO-0812LN+  
131015  
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# Typical Performance Data/Curves

## TO-0812LN+

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P <sub>OUT</sub> at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
800.00	25.24	26.21	26.52	25.41	25.15	25.23	2.21	1.84	0.97	9.27
850.00	25.45	26.39	26.68	24.15	23.86	23.73	1.90	1.69	0.92	9.74
900.00	25.57	26.47	26.75	23.16	22.93	22.92	1.70	1.58	0.92	9.88
950.00	25.65	26.51	26.77	22.43	22.37	22.30	1.59	1.52	0.90	10.22
1000.00	25.70	26.53	26.78	21.75	21.94	21.80	1.57	1.46	0.92	10.46
1050.00	25.78	26.59	26.83	21.13	21.18	21.12	1.61	1.42	0.90	10.68
1100.00	25.85	26.65	26.89	20.54	20.51	20.85	1.71	1.40	0.88	10.88
1150.00	25.96	26.74	26.98	20.06	20.16	20.07	1.85	1.39	0.85	10.95
1170.00	25.99	26.78	27.02	19.68	19.83	19.85	1.91	1.39	0.85	10.95
1200.00	26.03	26.83	27.07	19.55	19.55	19.59	2.01	1.39	0.82	10.95



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