Plug-In

Low Noise Amplifier

TO-1217LN+

50Ω 1200 to 1700 MHz

Generic photo used for illustration purposes only

CASE STYLE: QQ96

+RoHS Compliant

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

Features

- very low noise, 1.6 dB max.
- wideband, 1200 to 1700 MHz
- hermetic, TO-8 can

Applications

- military, hi-rel applications
- GPS
- mar sat
- communication systems

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	Max.	Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Input (no damage)	IP3 Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
TO-1217LN+	1200	1700	1.6	20	±1.0	+10	+13	+25	2.5	2.5	15	70

Noise Figure specified at room temperature, increases to 2 dB typical at +85°C

Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

Pin Connections

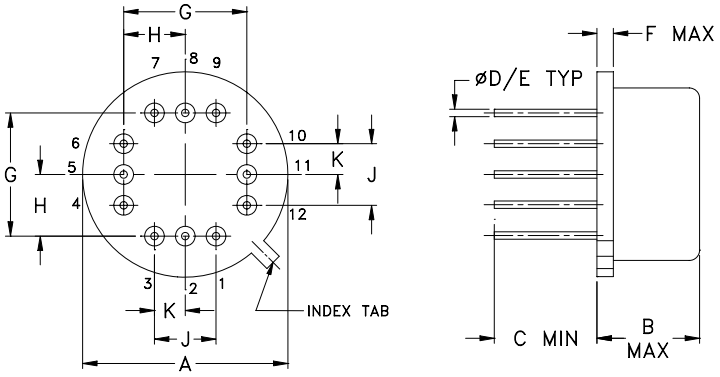
RF IN	5
RF OUT	11
DC	2
GROUND	1,3,4,6,7,8,9,10,12
CASE GROUND	1,3,4,6,7,8,9,10,12

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)

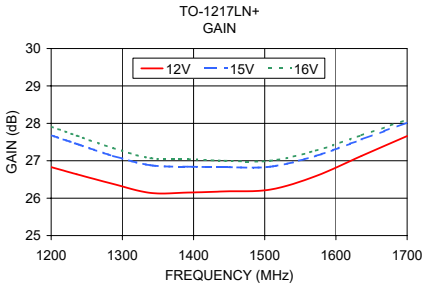
A	B	C	D	E	F	G	H	J	K	wt
.600	.250	.25	.016	.020	.04	.400	.200	.200	.100	grams
15.24	6.35	6.35	0.41	0.51	1.02	10.16	5.08	5.08	2.54	4.0

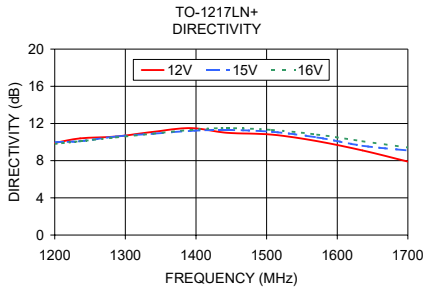
Notes

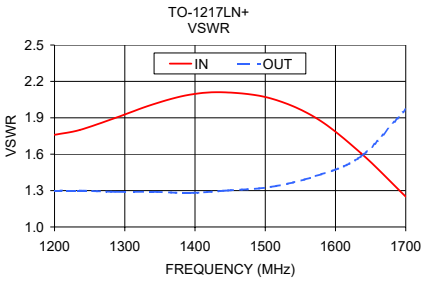
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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

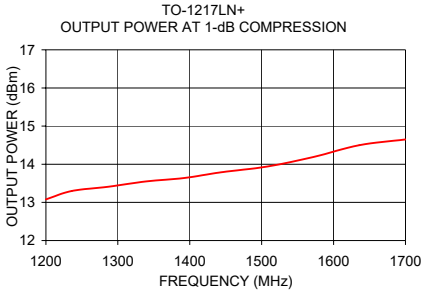
Typical Performance Data/Curves TO-1217LN+

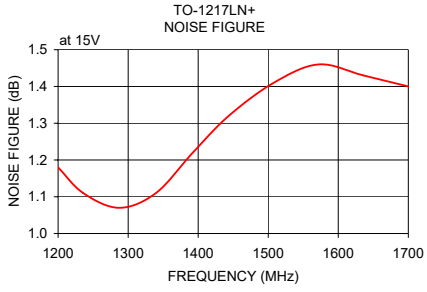
FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT	15V	15V
1200.00	26.83	27.68	27.91	9.90	10.00	9.80	1.76	1.30	1.18	13.08
1236.00	26.64	27.45	27.67	10.40	10.10	10.10	1.80	1.30	1.11	13.30
1287.00	26.38	27.13	27.34	10.60	10.60	10.50	1.90	1.29	1.07	13.41
1339.60	26.14	26.88	27.07	11.10	10.90	10.90	2.01	1.29	1.11	13.55
1392.30	26.15	26.84	27.04	11.50	11.20	11.30	2.09	1.28	1.22	13.64
1443.60	26.18	26.83	27.00	11.00	11.30	11.50	2.11	1.30	1.32	13.79
1507.70	26.23	26.84	27.00	10.80	11.10	11.30	2.06	1.33	1.41	13.94
1571.80	26.59	27.13	27.27	10.10	10.50	10.80	1.90	1.42	1.46	14.19
1635.90	27.13	27.57	27.68	9.10	9.60	10.10	1.61	1.58	1.43	14.50
1700.00	27.66	28.02	28.10	7.90	9.10	9.40	1.25	1.97	1.40	14.65











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