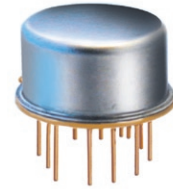


Plug-In Low Noise Amplifier

TO-1217LN+

50Ω 1200 to 1700 MHz



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

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify 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 | | Min. | Flatness Max. | Output (1 dB Compr.) Typ. | Input (no damage) | | IP3 Typ. | In | Out | Volt (V) Nom. |
| 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

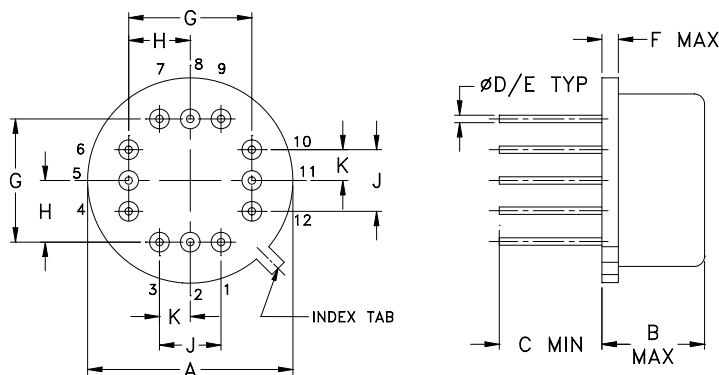
| | |
|-------------|---------------------|
| RF IN | 5 |
| RF OUT | 11 |
| DC | 2 |
| GROUND | 1,3,4,6,7,8,9,10,12 |
| CASE GROUND | 1,3,4,6,7,8,9,10,12 |

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 |

Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

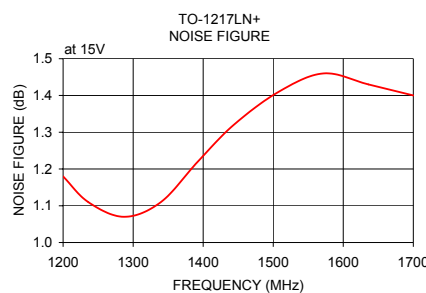
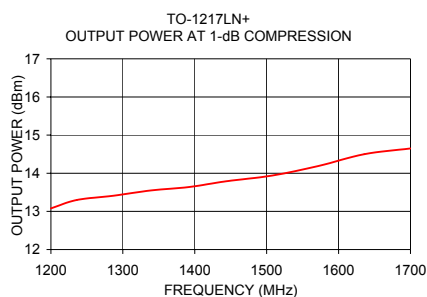
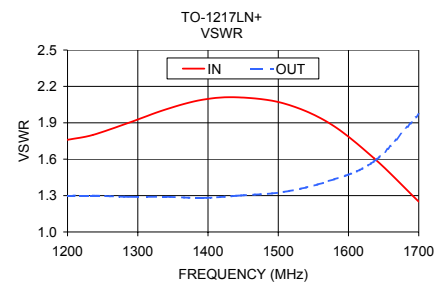
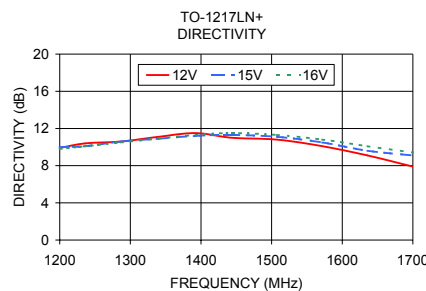
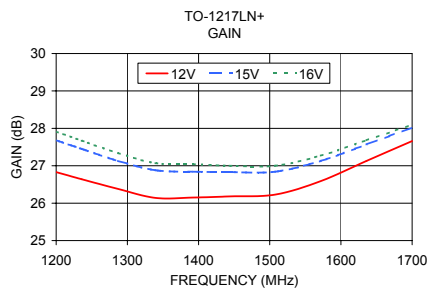
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TO-1217LN+
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Typical Performance Data/Curves

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 | | |
| 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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