

# Plug-In Low Noise Amplifier

## TO-1724LN+ TO-1724LN

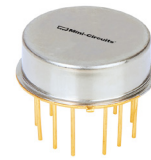
50Ω 1700 to 2400 MHz

### Features

- very low noise, 1.6 dB max.
- wideband, 1700 to 2400 MHz
- hermetic, TO-8 can

### Applications

- military, hi-rel applications
- PCS/DCS
- UMTS



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

### 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
TO-1724LN(+)	1700	2400	1.6	20	±1.0	+10	+13	+22	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

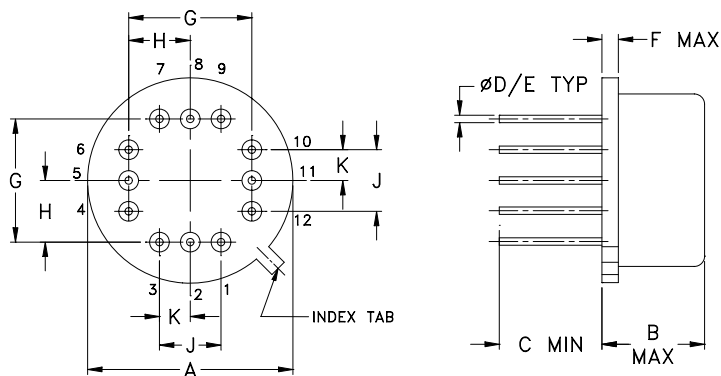
RF IN	5
RF OUT	11
DC	2
GROUND	1,3,4,6,7,8,9,10,12
CASE GROUND	1,3,4,6,7,8,9,10,12

### 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

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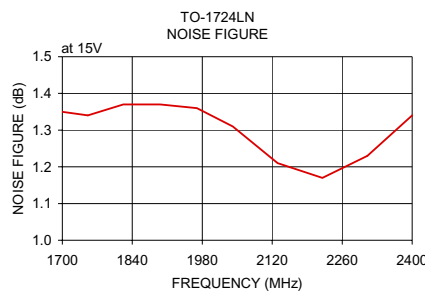
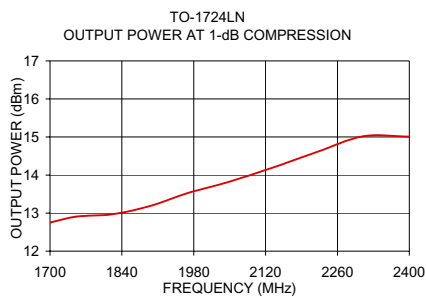
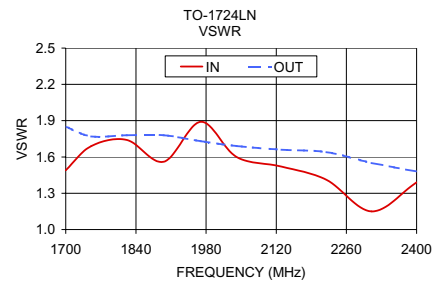
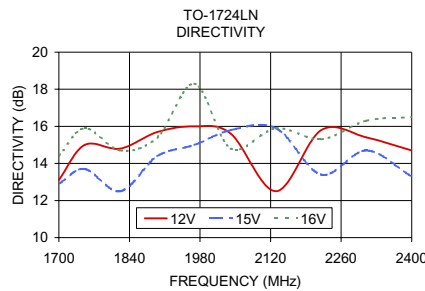
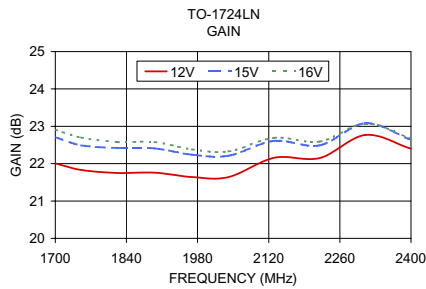
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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TO-1724LN+  
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Page 1 of 2

# TO-1724LN+ TO-1724LN

## Typical Performance Data/Curves

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		
1700.00	22.01	22.71	22.91	13.10	12.90	14.40	1.49	1.85	1.35	12.75
1751.20	21.83	22.49	22.70	15.00	13.70	15.90	1.69	1.77	1.34	12.91
1821.90	21.75	22.42	22.58	14.80	12.50	14.70	1.74	1.78	1.37	12.97
1895.50	21.76	22.41	22.58	15.70	14.40	15.40	1.56	1.78	1.37	13.19
1969.20	21.64	22.24	22.38	16.00	15.00	18.30	1.89	1.73	1.36	13.53
2041.00	21.64	22.21	22.33	15.60	15.80	14.80	1.60	1.69	1.31	13.79
2130.80	22.16	22.61	22.69	12.50	15.90	15.90	1.52	1.66	1.21	14.18
2220.50	22.15	22.49	22.59	15.80	13.40	15.30	1.41	1.64	1.17	14.61
2310.30	22.77	23.08	23.07	15.40	14.70	16.30	1.15	1.55	1.23	15.02
2400.00	22.40	22.64	22.67	14.70	13.30	16.50	1.39	1.48	1.34	15.01



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