

Low Noise Amplifier

ZQL-1900MLNW+

50Ω

1800 to 2000 MHz

Features

- Very low noise figure, 1.6 dB max.
- High IP3, +41 dBm typ.
- Rugged, shielded case

Applications

- PCS
- UMTS
- Mobile satellite service



Case Style: CW686

Connectors Model

SMA ZQL-1900MLNW+

+RoHS Compliant

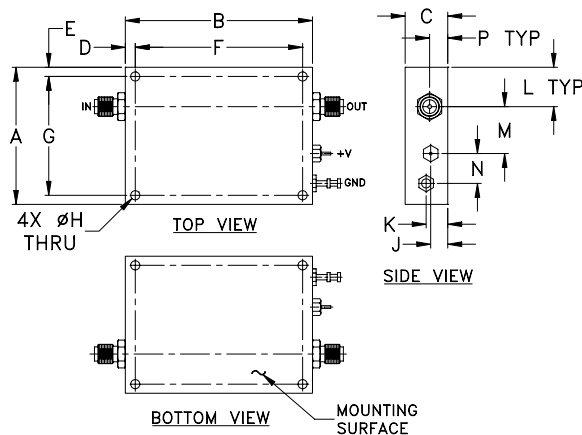
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1800		2000	MHz
Noise Figure	1800-2000	—	—	1.6	dB
Gain	1800-2000	23	—	—	dB
Gain Flatness	1800-2000	—	—	±2.0	dB
Output Power at 1dB compression	1800-2000	—	+25	—	dBm
Output third order intercept point	1800-2000	—	+41	—	dBm
Input VSWR	1800-2000	—	1.4	—	:1
Output VSWR	1800-2000	—	1.25	—	:1
DC Supply Voltage	1800-2000	—	15	—	V
Supply Current	1800-2000	—	—	310	mA

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

Outline Drawing



Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 70°C
Storage Temperature	-55°C to 100°C
DC Voltage	+17V
Input RF Power (no damage)	+3 dBm

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

Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.77	2.42	.55	.13	.12	2.165	1.535	.126	.22	.28	.51	.61	.39	0.22	grams
44.96	61.47	13.97	3.30	3.05	55.0	39.0	3.20	5.59	7.11	12.95	15.49	9.91	5.59	71.0

Notes

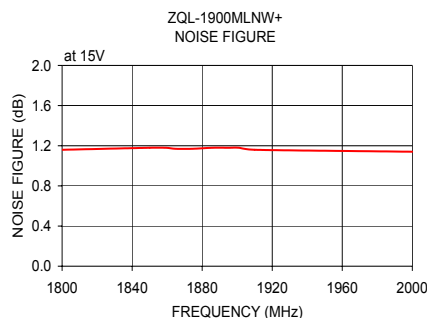
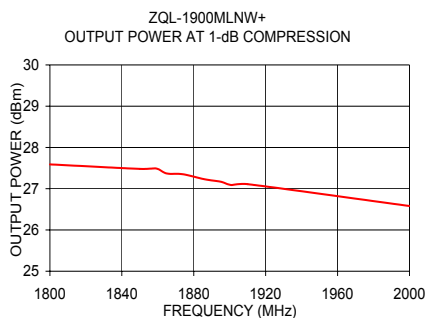
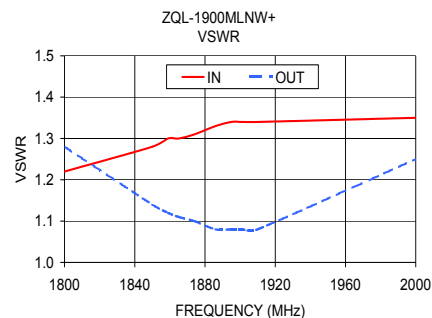
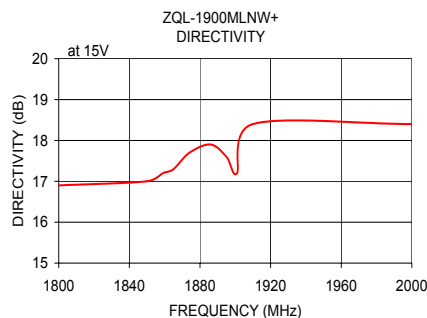
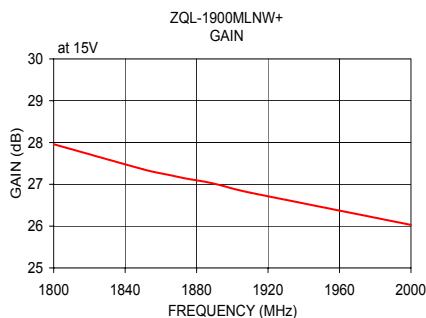
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's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



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

REV. D
M151107
ZQL-1900MLNW+
151005
Page 1 of 2

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V		IN	OUT		15V
1800.00	27.96	16.90	1.22	1.28	1.16	27.59
1850.00	27.36	17.00	1.28	1.14	1.18	27.48
1859.00	27.27	17.20	1.30	1.12	1.18	27.49
1865.00	27.22	17.30	1.30	1.11	1.17	27.37
1874.00	27.14	17.70	1.31	1.10	1.17	27.35
1886.00	27.05	17.90	1.33	1.08	1.18	27.23
1895.00	26.96	17.60	1.34	1.08	1.18	27.17
1901.00	26.89	17.20	1.34	1.08	1.18	27.09
1910.00	26.80	18.40	1.34	1.08	1.16	27.11
2000.00	26.03	18.40	1.35	1.25	1.14	26.58



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

