

Coaxial Low Noise Amplifier

ZQL-1900LN+

50Ω 1850 to 1910 MHz

Features

- Very low noise figure, 1.5 dB max.
- High IP3, +37 dBm typ.
- Rugged, shielded case

Applications

- PCS
- UMTS
- Mobile satellite service



Generic photo used for illustration purposes only

Case Style: CW686	
Connectors	Model
SMA	ZQL-1900LN+

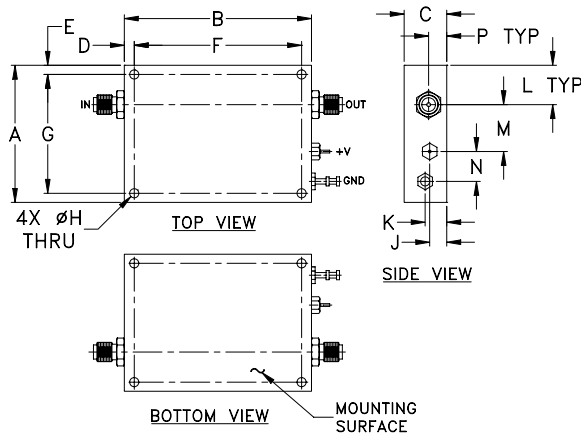
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1850		1910	MHz
Noise Figure	1850-1910	—	—	1.5	dB
Gain	1850-1910	15	—	—	dB
Gain Flatness	1850-1910	—	—	±0.5	dB
Output Power at 1dB compression	1850-1910	—	+19	—	dBm
Output third order intercept point	1850-1910	—	+37	—	dBm
Input VSWR	1850-1910	—	1.15	—	:1
Output VSWR	1850-1910	—	1.25	—	:1
DC Supply Voltage	1850-1910	—	15	—	V
Supply Current	1850-1910	—	—	160	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)	+10 dBm

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

Outline Dimensions (inch/mm)

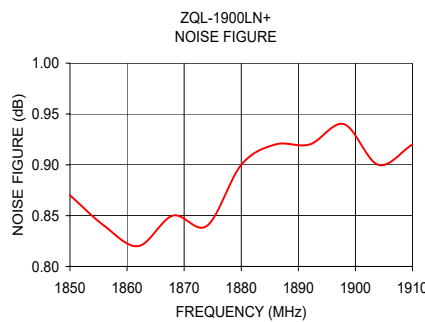
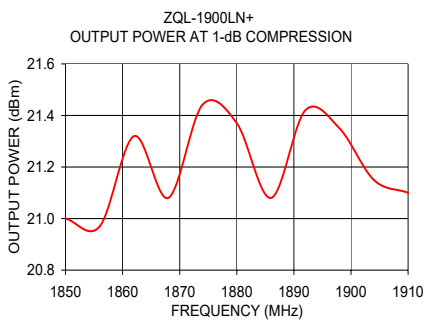
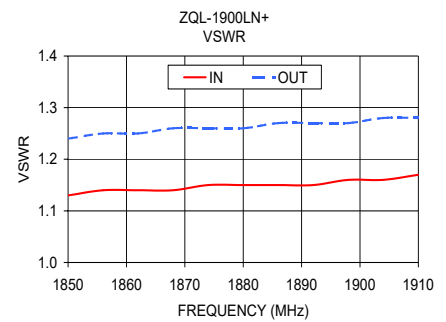
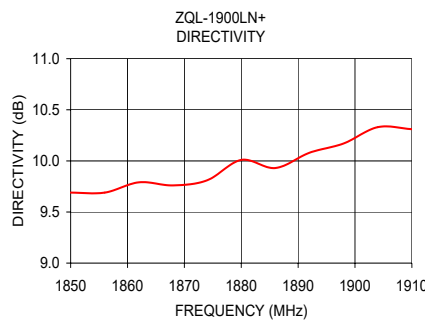
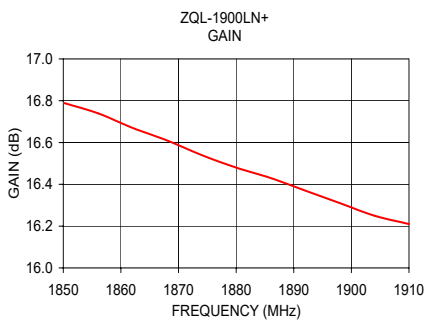
A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.77	2.42	.55	.13	.12	2.165	1.535	.126	.22	.28	.51	.61	.39	0.22	grams
44.96	61.47	13.97	3.30	3.05	55.0	39.0	3.20	5.59	7.11	12.95	15.49	9.91	5.59	71.0

Notes

- 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



FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V		IN	OUT		
1850.00	16.79	9.69	1.13	1.24	0.87	21.00
1856.00	16.74	9.69	1.14	1.25	0.84	20.97
1862.00	16.67	9.79	1.14	1.25	0.82	21.32
1868.00	16.61	9.76	1.14	1.26	0.85	21.08
1874.00	16.54	9.81	1.15	1.26	0.84	21.44
1880.00	16.48	10.01	1.15	1.26	0.90	21.37
1886.00	16.43	9.93	1.15	1.27	0.92	21.08
1892.00	16.37	10.08	1.15	1.27	0.92	21.42
1898.00	16.31	10.17	1.16	1.27	0.94	21.35
1904.00	16.25	10.33	1.16	1.28	0.90	21.15
1910.00	16.21	10.31	1.17	1.28	0.92	21.10



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