

Coaxial Low Noise Amplifier

ZQL-1900MLN+ ZQL-1900MLN

50Ω 1850 to 1910 MHz

Features

- Very low noise figure, 1.5 dB max.
- High IP3, +41 dBm typ.
- Rugged, shielded case

Applications

- PCS
- UMTS
- Mobile satellite service



Case Style: CW686

Connectors	Model
SMA	ZQL-1900MLN(+)

+RoHS Compliant

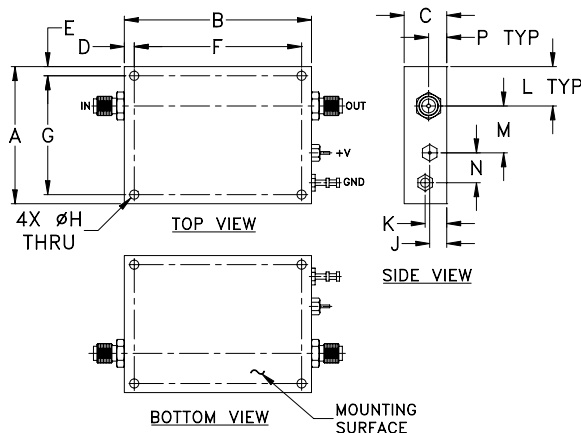
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1850		1910	MHz
Noise Figure	1850-1910	—	—	1.5	dB
Gain	1850-1910	25	—	—	dB
Gain Flatness	1850-1910	—	—	±0.7	dB
Output Power at 1dB compression	1850-1910	—	+26	—	dBm
Output third order intercept point	1850-1910	—	+41	—	dBm
Input VSWR	1850-1910	—	1.25	—	:1
Output VSWR	1850-1910	—	1.2	—	:1
DC Supply Voltage	1850-1910	—	15	—	V
Supply Current	1850-1910	—	—	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

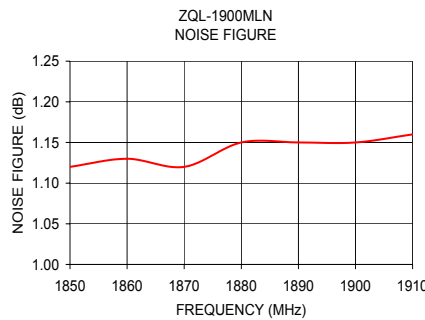
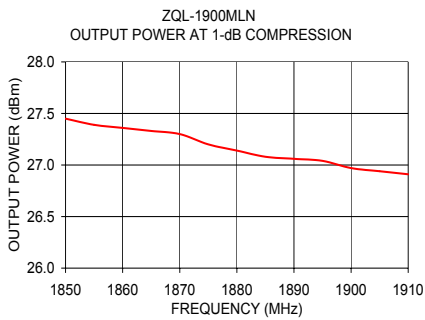
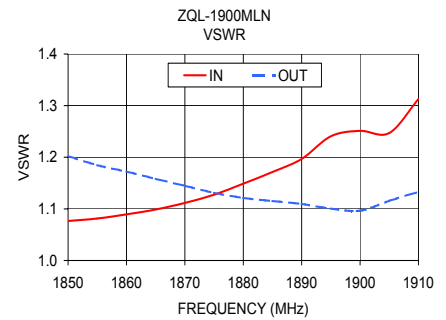
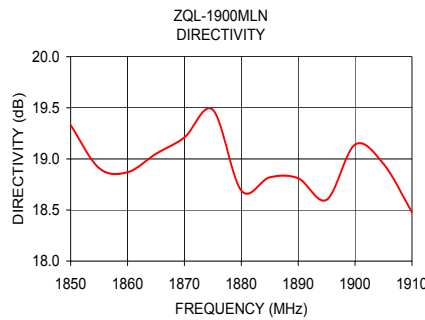
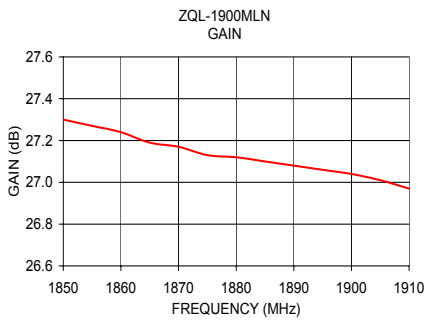
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Typical Performance Data/Curves

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V	15V	IN	OUT	15V	15V
1850.00	27.30	19.33	1.08	1.20	1.12	27.45
1855.00	27.27	18.91	1.08	1.18		27.39
1860.00	27.24	18.87	1.09	1.17	1.13	27.36
1865.00	27.19	19.05	1.10	1.16		27.33
1870.00	27.17	19.21	1.11	1.14	1.12	27.30
1875.00	27.13	19.48	1.13	1.13		27.20
1880.00	27.12	18.69	1.15	1.12	1.15	27.14
1885.00	27.10	18.82	1.17	1.12		27.08
1890.00	27.08	18.81	1.20	1.11	1.15	27.06
1895.00	27.06	18.60	1.24	1.10		27.04
1900.00	27.04	19.14	1.25	1.10	1.15	26.97
1905.00	27.01	18.95	1.25	1.12		26.94
1910.00	26.97	18.48	1.31	1.13	1.16	26.91



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