Coaxial

Low Noise Amplifier

ZX60-242LN+

50Ω 1710 to 2400 MHz

Features

- Ultra low noise figure, 0.75 dB typ.
- Output power, up to +17 dBm typ.
- Good output IP3, 33 dBm typ.
- Low current consumption
- Good return loss
- Unconditionally stable
- Protected by US patent 6,790,049

Applications

- Base transceiver station, tower mounted amplifier, repeater
- WCDMA
- TD SCDMA
- PCS Rx / PCS Tx
- General purpose low noise amplifier
- Lab
- Instrumentation
- Test equipment

Case Style: GA955

Connectors	Model	Price	Qty.
SMA	ZX60-242LN-S+	$44.95 ea.	(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.

Electrical Specifications at 25°C

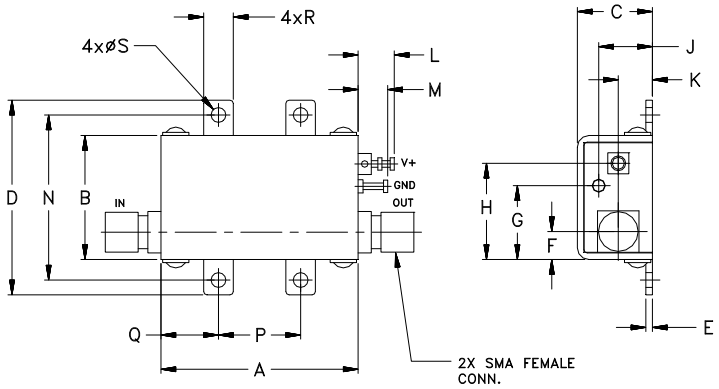
Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1710		2400	MHz
Noise Figure	1710 - 1880		0.70	0.95	dB
	1850 - 1990		0.70	0.95	
	1990 - 2200		0.75	0.95	
	2200 - 2400		0.75	1.00	
Gain	1710 - 1880	12.0	14.0		dB
	1850 - 1990	11.5	13.5		
	1990 - 2200	10.5	12.5		
	2200 - 2400	10.0	11.5		
Gain Flatness	1710 - 1880		± 0.5	± 1.0	dB
	1850 - 1990		± 0.3	± 0.7	
	1990 - 2200		± 0.5	± 1.0	
	2200 - 2400		± 0.4	± 0.8	
Output Power at 1dB compression	1710 - 1880	15.0	16.5		dBm
	1850 - 1990	15.0	16.5		
	1990 - 2200	15.0	16.5		
	2200 - 2400	15.0	16.5		
Output third order intercept point	1710 - 1880		32.0		dBm
	1850 - 1990		32.5		
	1990 - 2200		33.5		
	2200 - 2400		34.5		
Input VSWR	1710 - 1880		1.2		:1
	1850 - 1990		1.2		
	1990 - 2200		1.2		
	2200 - 2400		1.2		
Output VSWR	1710 - 1880		1.6		:1
	1850 - 1990		1.7		
	1990 - 2200		1.7		
	2200 - 2400		1.6		
Active Directivity	1710 - 2400		8		dB
DC Supply Voltage			5		V
Supply Current			40	46	mA

Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C Case
Storage Temperature	-55°C to 100°C
DC Voltage	5.5 V
Input RF Power (no damage)	+10 dBm
Power Consumption	250 mW

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	L	M	N	P	Q	R	S	wt.
1.20	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @ 1dB COMPRESSION (dBm)	OUTPUT IP3 (dBm)	NF (dB)
1710.00	14.40	7.89	1.20	1.57	16.14	30.60	0.68
1740.00	14.23	7.92	1.20	1.59	16.25	31.05	0.67
1760.00	14.12	7.93	1.20	1.61	16.05	30.79	0.67
1780.00	14.02	7.92	1.19	1.62	16.01	31.14	0.68
1800.00	13.91	7.94	1.19	1.62	16.11	31.56	0.69
1850.00	13.66	7.97	1.19	1.64	16.08	32.01	0.66
1880.00	13.52	7.95	1.18	1.65	15.97	31.94	0.68
1900.00	13.42	7.96	1.18	1.66	16.10	32.31	0.68
1940.00	13.24	7.95	1.17	1.66	16.13	32.41	0.73
1960.00	13.16	7.95	1.17	1.66	16.07	32.66	0.73
1990.00	13.03	7.95	1.16	1.67	16.15	33.02	0.71
2000.00	12.99	7.92	1.16	1.67	16.11	33.06	0.70
2040.00	12.83	7.91	1.15	1.67	16.28	33.59	0.70
2100.00	12.59	7.88	1.13	1.66	16.46	33.94	0.66
2140.00	12.45	7.83	1.12	1.65	16.38	33.93	0.66
2200.00	12.23	7.79	1.10	1.64	16.38	34.46	0.74
2240.00	12.10	7.76	1.09	1.63	16.76	34.17	0.73
2300.00	11.90	7.71	1.08	1.60	16.95	34.39	0.71
2340.00	11.77	7.68	1.07	1.58	16.93	34.75	0.77
2400.00	11.58	7.62	1.08	1.55	17.14	35.06	0.80