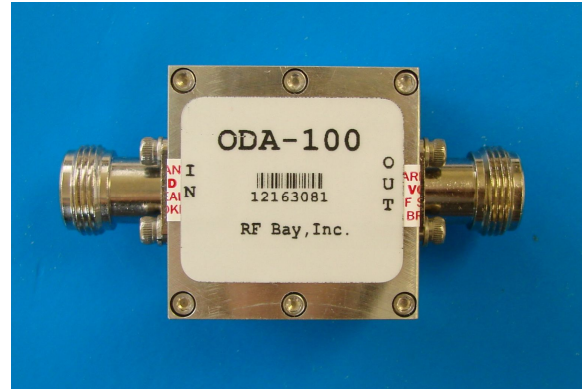


ODA Series 10–600MHz Outdoor Low Noise Amplifier

Features

- Frequency Range: 10-600MHz
- Gain: 20dB
- P_{1dB}: +18dBm
- IP3: +31dBm
- Noise Figure: 1.2dB
- DC Power: 12V/75mA
- Type N Connector

Picture



Description

ODA-100 is a 20dB Outdoor Low Noise Amplifier designed in waterproof housing from 10 to 600MHz with DC Power via RF output port.

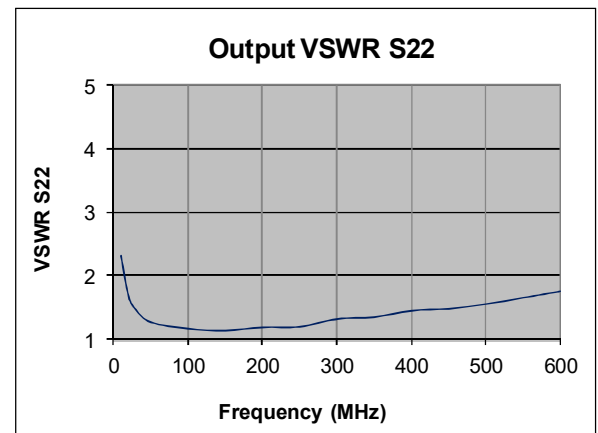
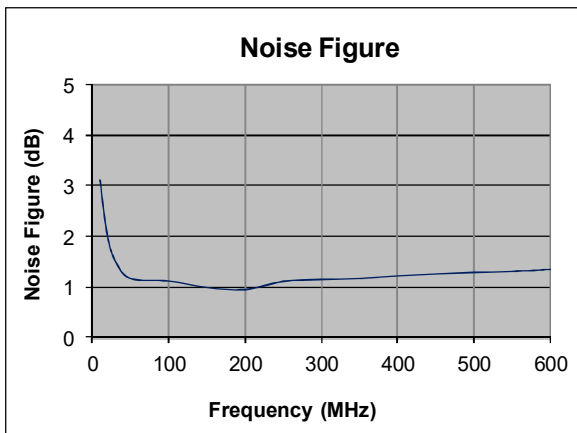
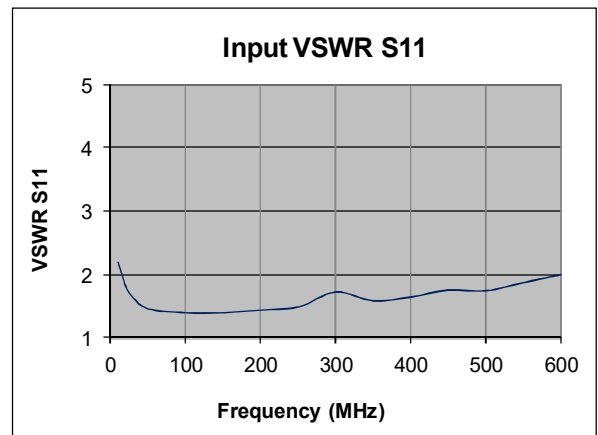
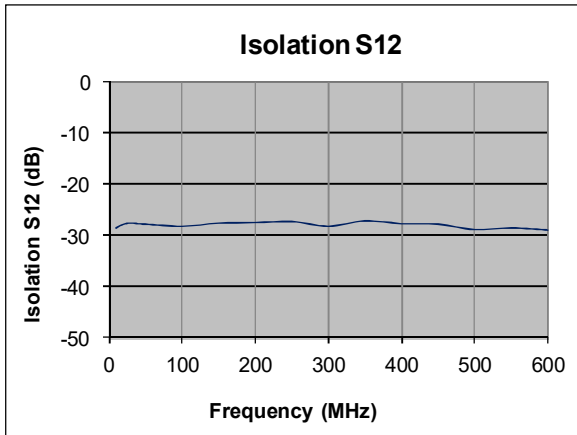
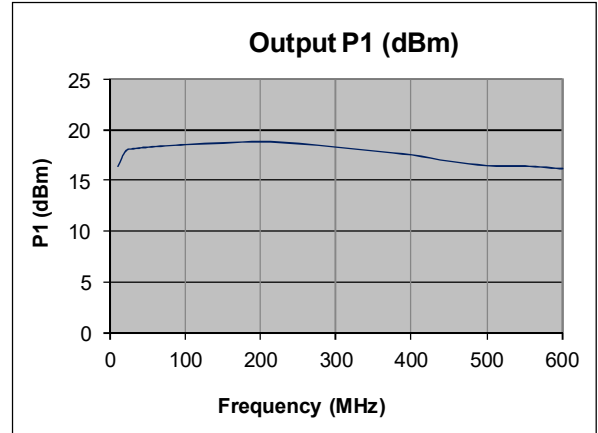
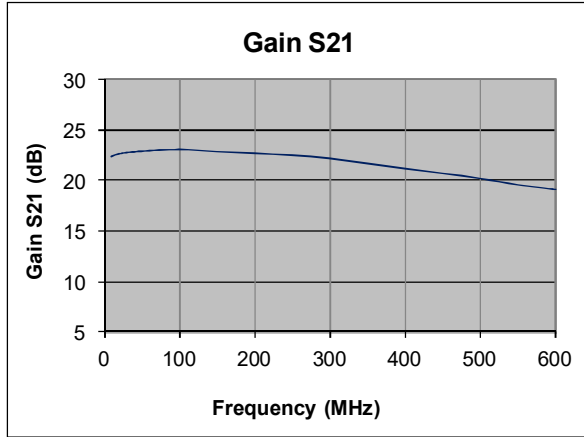
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{supply} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		600
Gain S21 f = 10MHz	dB		22.0	
f = 150MHz	dB		22.5	
f = 300MHz	dB		22.0	
f = 450MHz	dB		20.5	
f = 600MHz	dB		19.0	
Gain Flatness	dB		± 2.0	
P _{1dB} @ 300MHz	dBm		+18	
Output IP3 @ 300MHz	dBm		+31	
Noise Figure @ 300MHz	dB		1.2	1.5
Reverse Isolation S12	dB		-27	
VSWR Input VSWR S11			1.7:1	
Output VSWR S22			1.3:1	
DC Power Supply	V		12 to 15	
Supply Current	mA		75	

Performance tested with Mini-Circuits Bias-Tee ZNBT-60-1W+

ODA Series 10–600MHz Outdoor Low Noise Amplifier

Typical Performance @ +25 °C



ODA Series 10–600MHz Outdoor Low Noise Amplifier

Typical Performance @ +25 °C

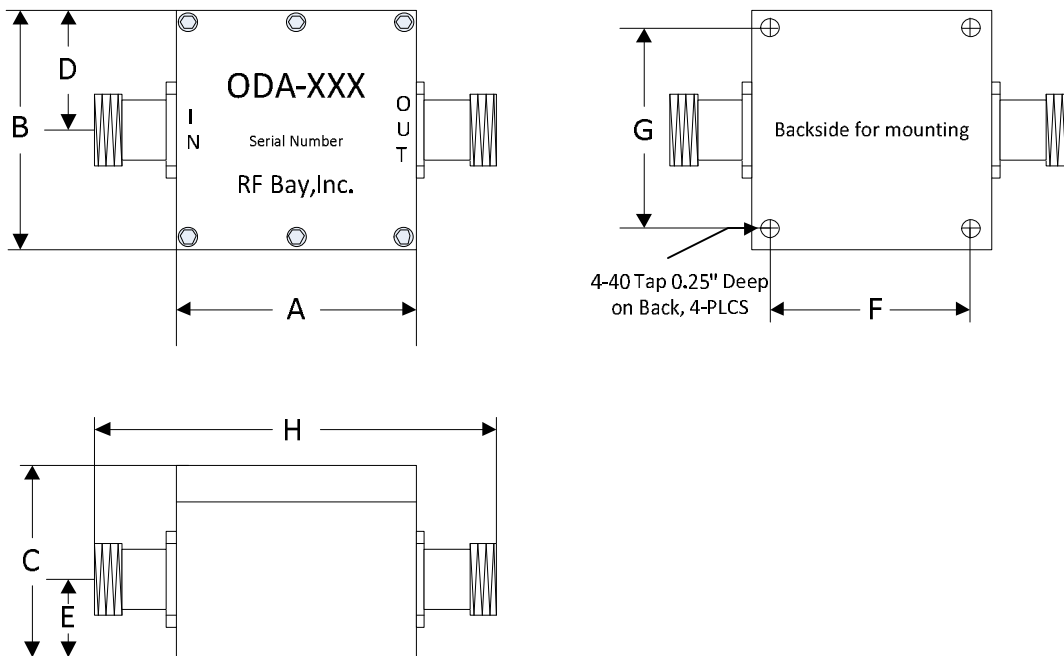
Frequency (MHz)	Noise Figure (dB)	Gain S_{21} (dB)	VSWR S_{11}	VSWR S_{22}	P_{1dB} (dBm)
10	3.11	22.39	2.20	2.30	+16.39
20	2.00	22.65	1.82	1.67	+17.87
30	1.51	22.76	1.63	1.46	+18.09
50	1.16	22.90	1.45	1.27	+18.26
100	1.11	23.07	1.39	1.17	+18.50
150	0.98	22.87	1.39	1.14	+18.66
200	0.94	22.71	1.43	1.19	+18.81
250	1.10	22.51	1.48	1.20	+18.60
300	1.14	22.20	1.72	1.31	+18.27
350	1.16	21.68	1.58	1.35	+17.88
400	1.21	21.19	1.64	1.45	+17.49
450	1.25	20.71	1.75	1.48	+16.87
500	1.28	20.21	1.74	1.55	+16.45
550	1.30	19.57	1.87	1.65	+16.41
600	1.34	19.12	2.00	1.75	+16.15

ODA Series 10–600MHz Outdoor Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



	A	B	C	D	E	F	G	H
Inch	1.50	1.50	1.25	0.75	0.45	1.25	1.25	3.00
mm	38.1	38.1	31.8	19.0	11.3	31.8	31.8	76.2