

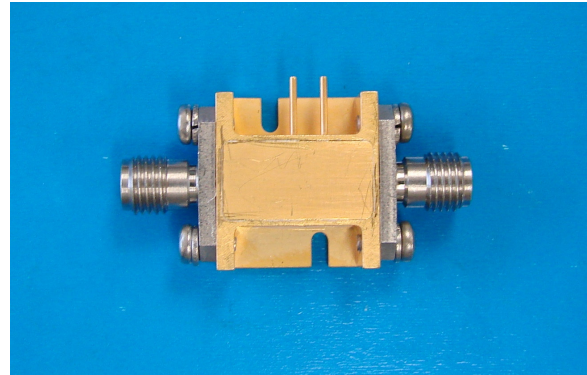
**XNA Series**

**0.1 – 10GHz Low Noise Amplifier**

**Features**

- Frequency Range: 0.1 - 10GHz
- Gain: 28dB min.
- P<sub>1dB</sub>: +10dBm min.
- IP3: +20dBm typ.
- Noise Figure: 2.0dB typ.
- DC Power: 15V @ 150mA
- Field Replaceable SMA-F

**Photo**



**Description**

XNA-00101000-201028 is a high performance Microwave Low Noise Amplifier, with standard frequency range of 100MHz to 10GHz.

**Electrical Specifications @+25 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +15VDC**

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.1		10
Gain (S21)	dB	28	33	
Gain Flatness	dB		±0.8	±1.5
Output Power P <sub>1dB</sub>	dBm	+10	+12	
Output Third Order Intercept IP3	dBm		+20	
Noise Figure *	dB		2.0	2.5
Isolation S12	dB		-60	
VSWR-Input (S11)	ratio		2.0:1	2.2:1
VSWR-Output (S22)	(unitless)		1.5:1	2.2:1
DC Power Supply - voltage	V	12	15	
DC Power Supply - current	mA		130	150
Operating Temperature	°C	-54		+85
Size (RF/DC feedthru's excluded)	Inch/mm	0.64 x 0.70 x 0.29/16.25 x 17.78 x 7.37 (LxWxH)		
Weight	Oz	0.35 (10 grams)		

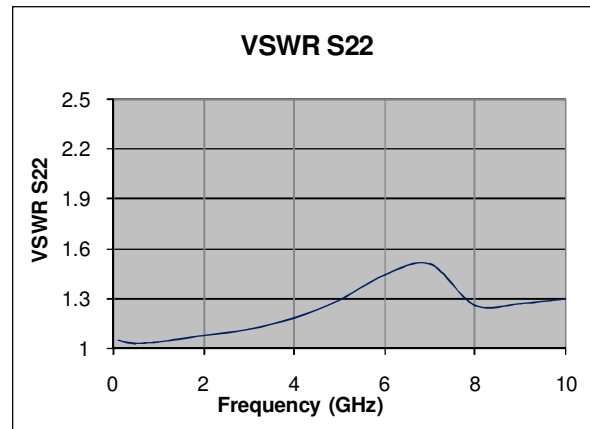
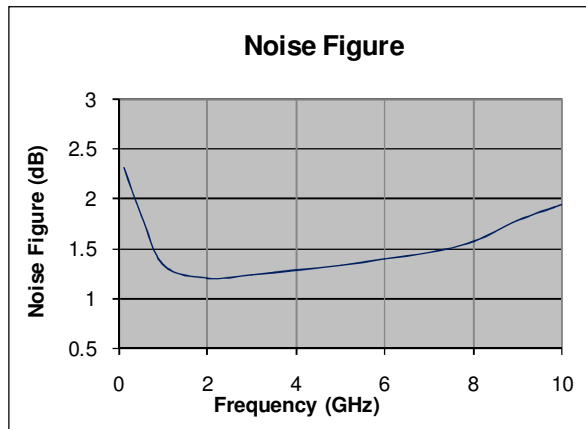
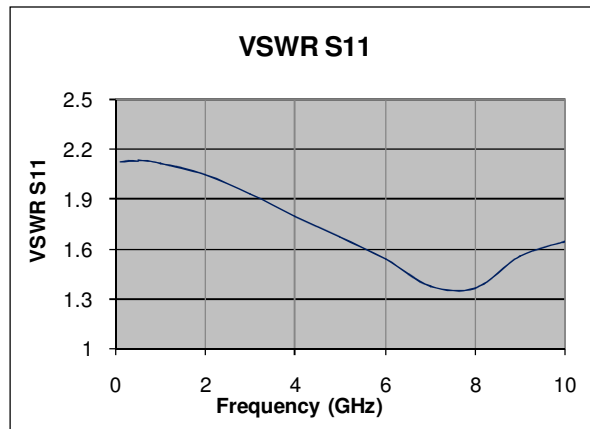
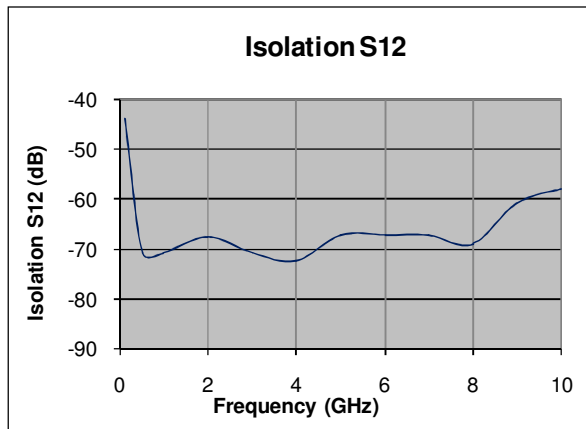
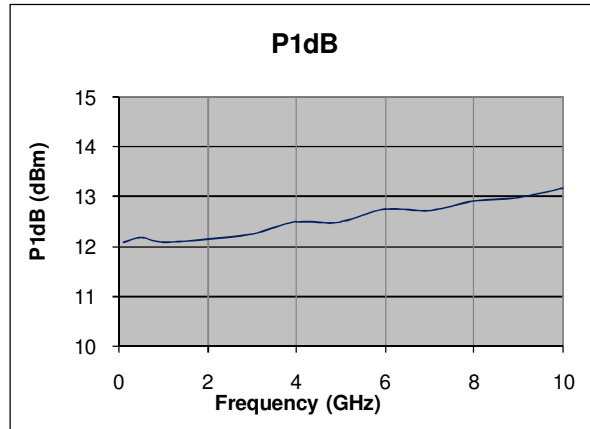
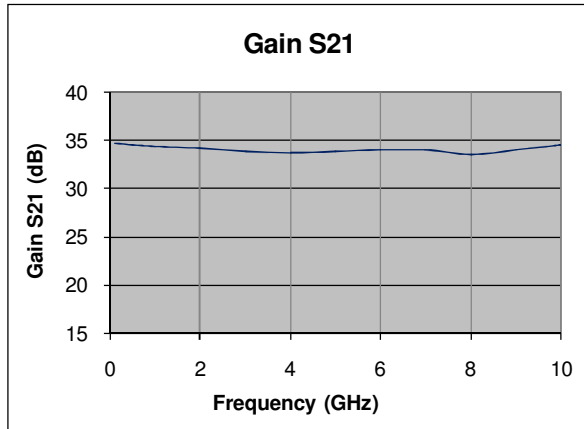
\*Noise Figure spec for over 500MHz. Below 500MHz, Noise Figure will increase due to 1/f noise

**WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C**

**XNA Series**

**0.1 – 10GHz Low Noise Amplifier**

**Typical Performance @ +25 °C**



## XNA Series

## 0.1 – 10GHz Low Noise Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-54 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline

