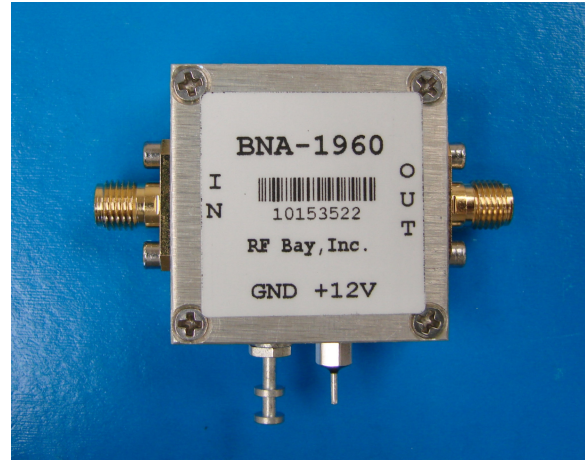


**BNA Series****1960MHz Cellular Band Amplifier****Features**

- Center Frequency:1960MHz
- Gain: 43dB
- Bandwidth: 60MHz
- P<sub>1dB</sub>: +4dBm
- IP3: +15dBm
- Noise Figure: 2dB
- DC Power: 12V/30mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

**Picture****Description**

BNA-1960 is Band Limited Low Noise Amplifier designed for 1.96GHz UMTS/LTE/GSM/CDMA DL Band receive application.

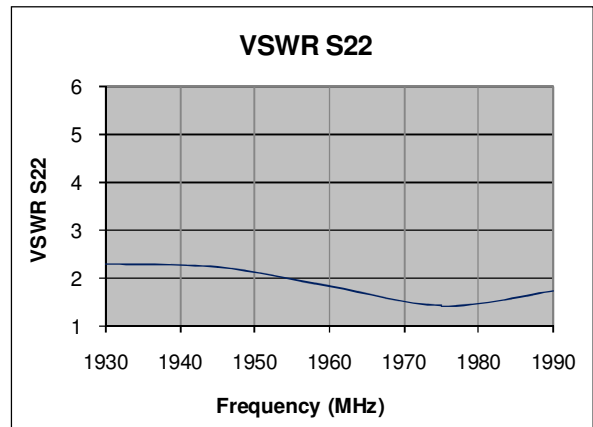
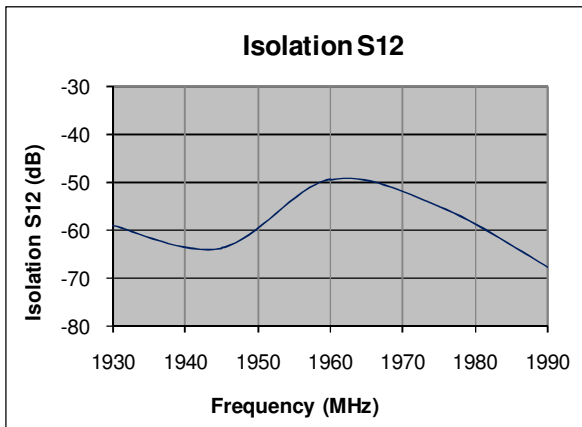
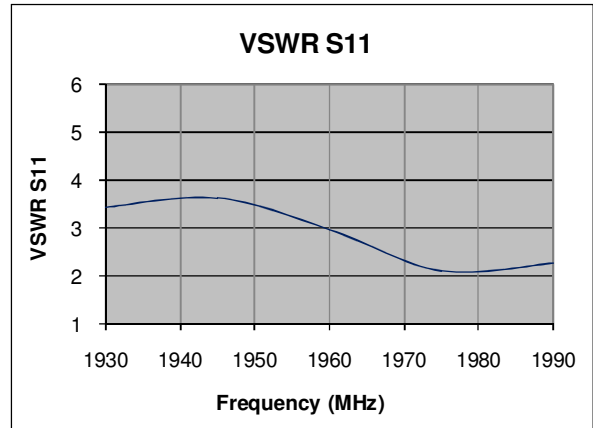
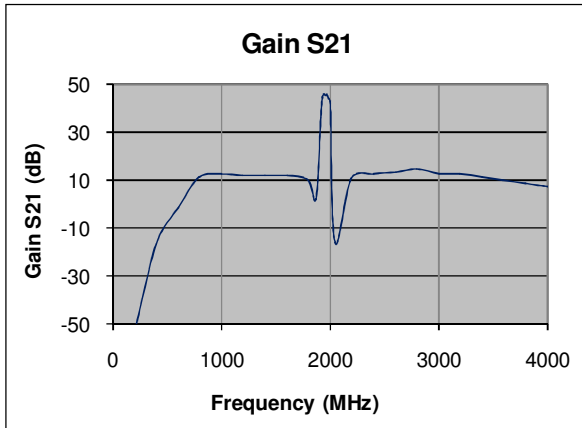
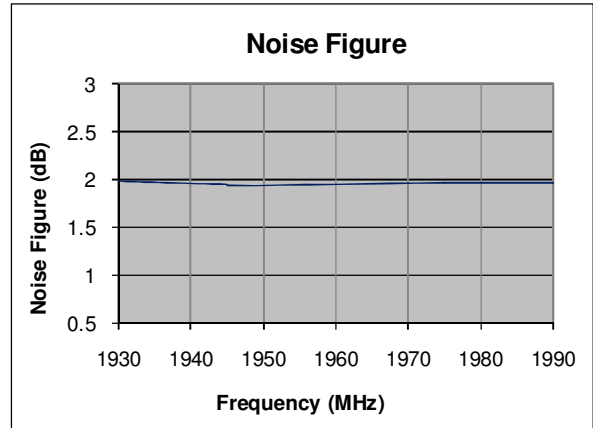
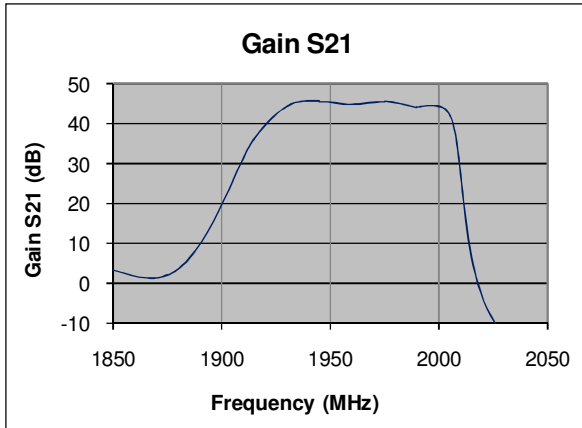
**Electrical Specifications @ +25 °C, Z<sub>in</sub> = Z<sub>out</sub> = 50 Ω, V<sub>cc</sub> = 12V**

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1930	1960	1990
Bandwidth	MHz		±30	
Gain	dB		43	
Gain Flatness	dB		± 0.8	± 1.2
P <sub>1dB</sub>	dBm		+4	
IP3	dBm		+15	
Noise Figure	dB		2.0	2.5
Reverse Isolation	dB		-50	
VSWR Input VSWR			1:3.0	
Output VSWR			1:2.0	
DC Power Supply	V	9	12	15
Supply Current	mA		30	

**BNA Series**

**1960MHz Cellular Band Amplifier**

**Typical Performance @ +25 °C**



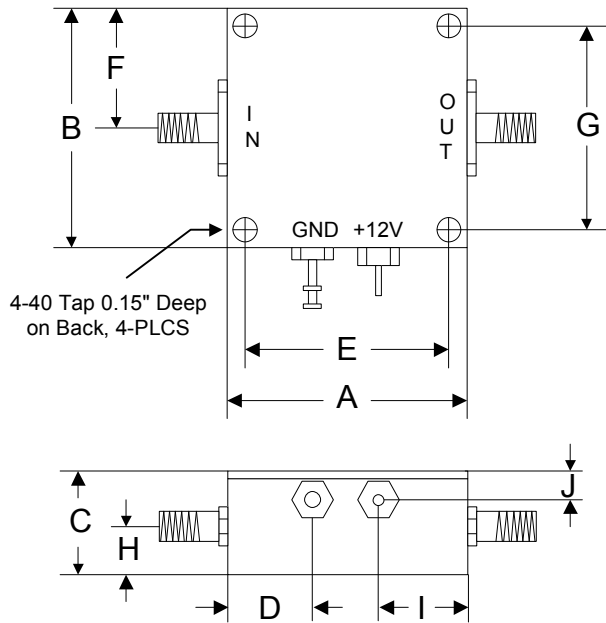
## BNA Series

## 1960MHz Cellular Band Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline



	A	B	C	D	E	F	G	H	I	J
<b>Inch</b>	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
<b>mm</b>	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76