Features:

Frequency: 1-18GHz

Small Singal Gain: 15dB

Noise Figure:1.7dB typ. / 2.1dB max.

P-1dB: 17dBm

Supplying: +5V/35mA

50Ohm Input/Output

100% In-situ Testing

Chip Size: 1.6 x 0.95 x 0.09 mm

Description:

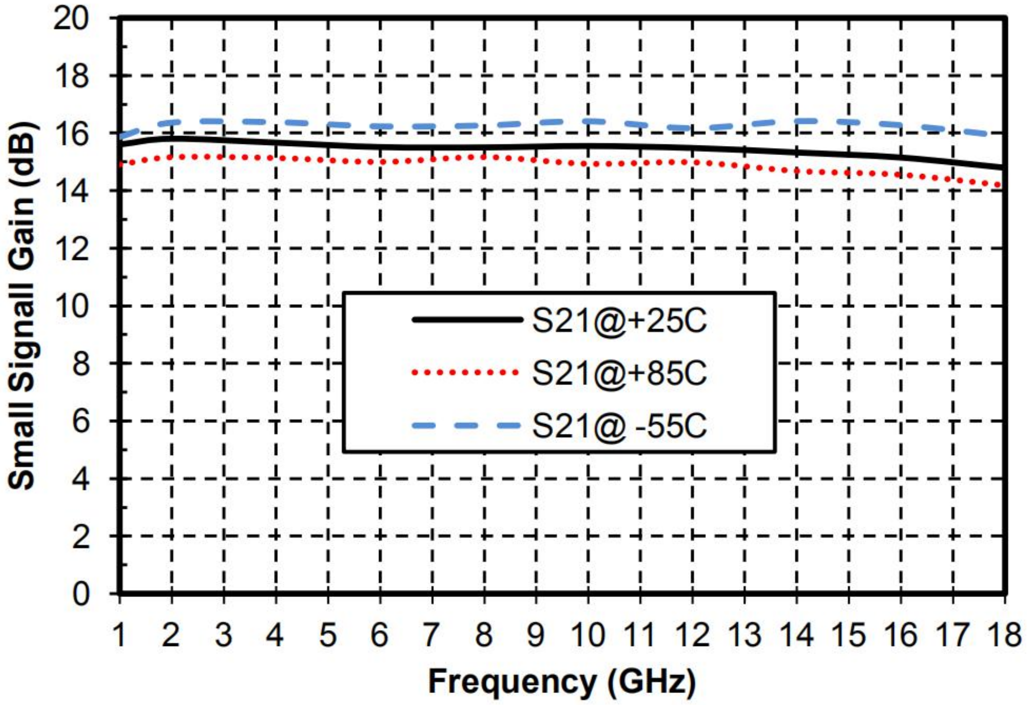
The YTLA-0118C is a Wide Band Low Noise Amplifier which operates betwee 1～18GHz， This model is with 15dB of small Singal gain and 1.8dB for its noise figure!It adopts +5V of its supplying!

Limited Parameter	
Max Drain Voltage	7V
Max Input Power	+20dBm
Working Temperature	-55 ~ +85° C

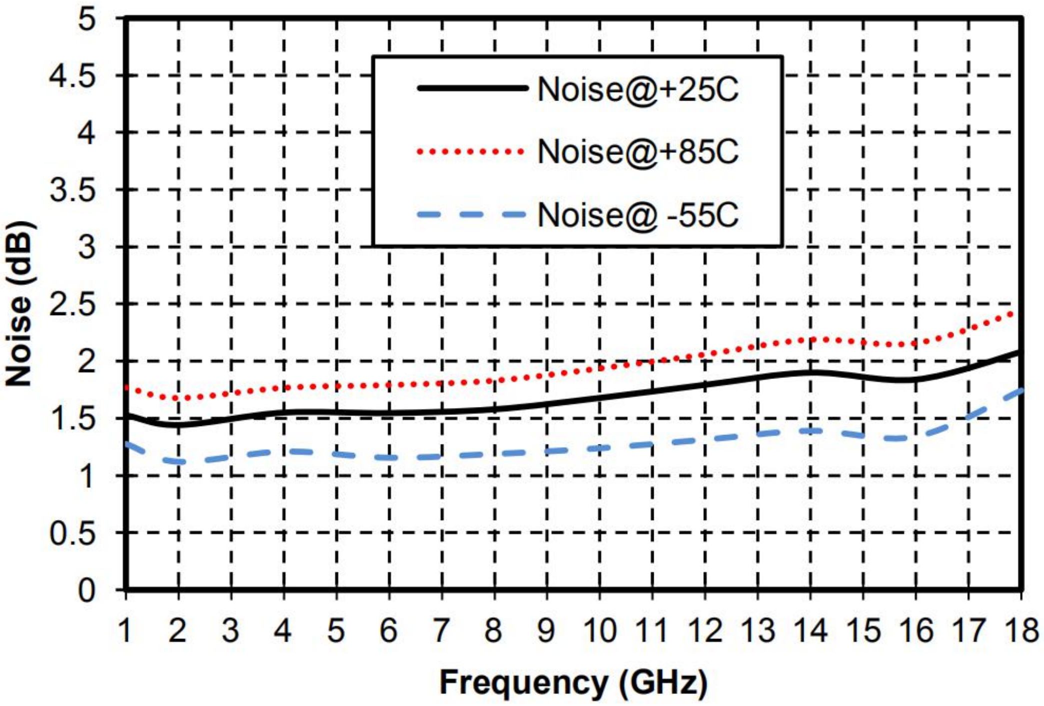
Storage Temperature	-65 ~ +150° C

Features	Min	Typical	Max	Unite
Frequency	1-18G			GHz
Small Singal Grain	14.5	15	15.5	dB
Flatness		±0.5		dB
Noise Figure	-	1.7	2.1	dB
P-1dB	16	17	18.5	dBm
Psat	18	19	19.5	dBm
Input Return Loss	13	13	-	dB
Output Return Loss	13	19	-	dB
Static Current		35		mA

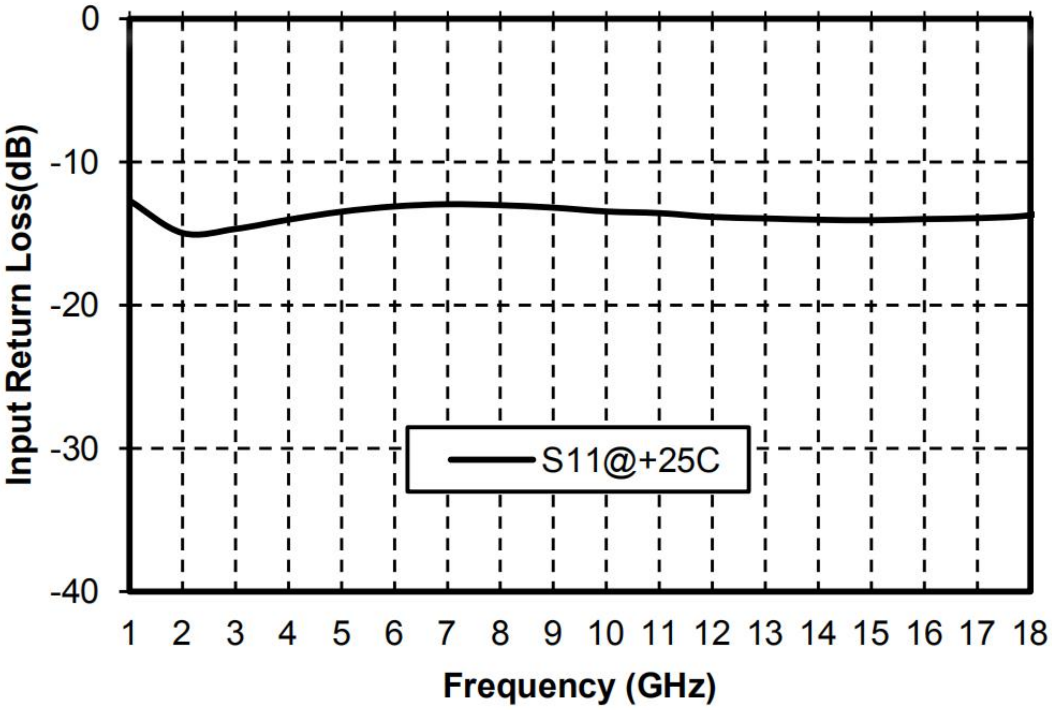
Gain VS Temperature



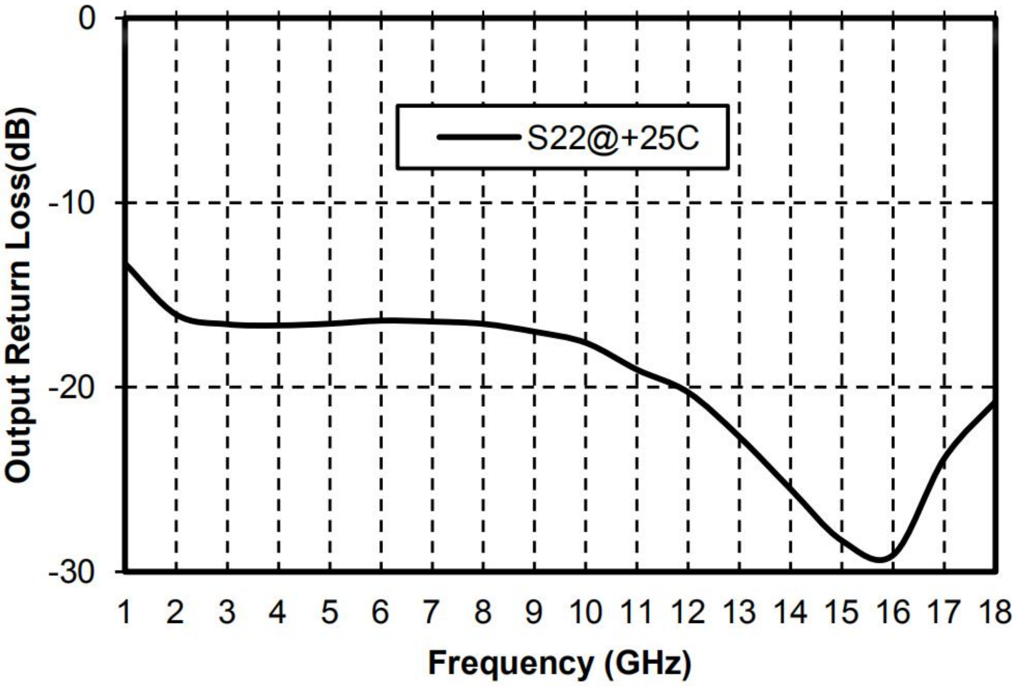
Noise Figure VS Frequency



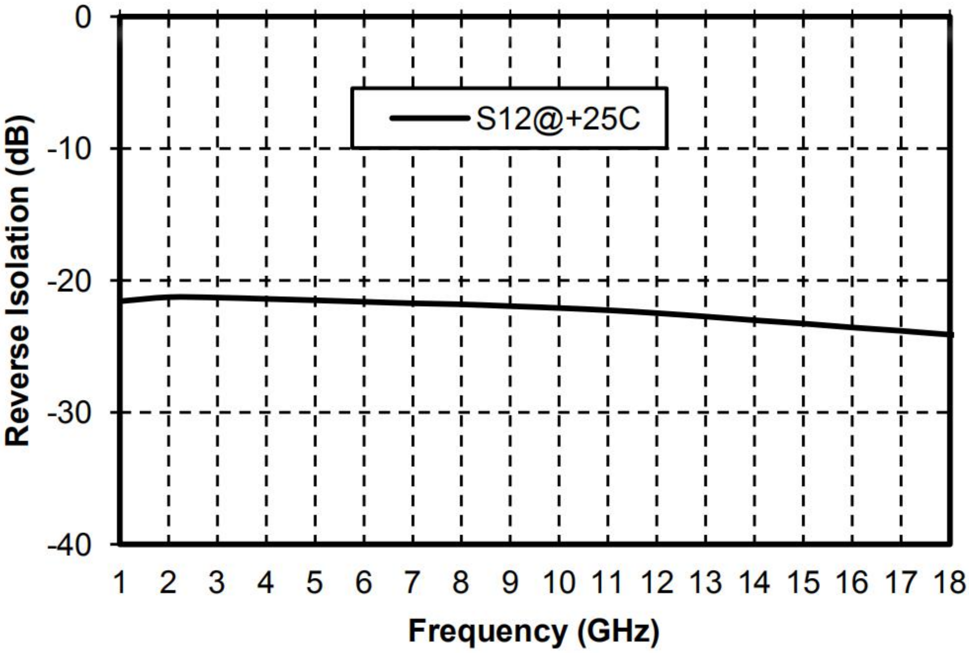
Input Return Loss VS Frequency



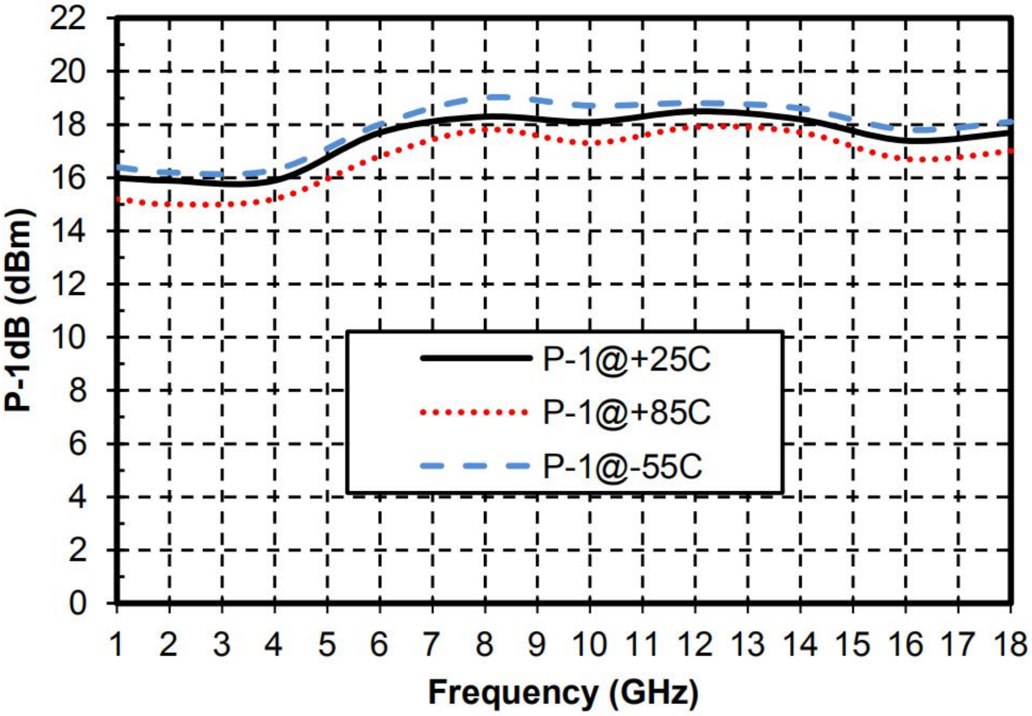
Output Return Loss VS Frequency



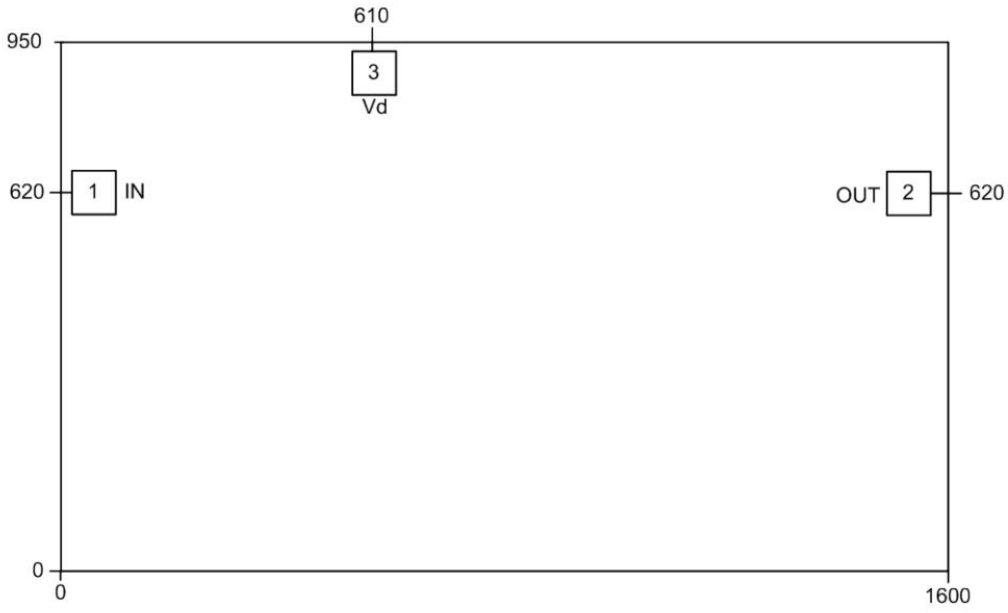
Reverse Isolation VS Frequency



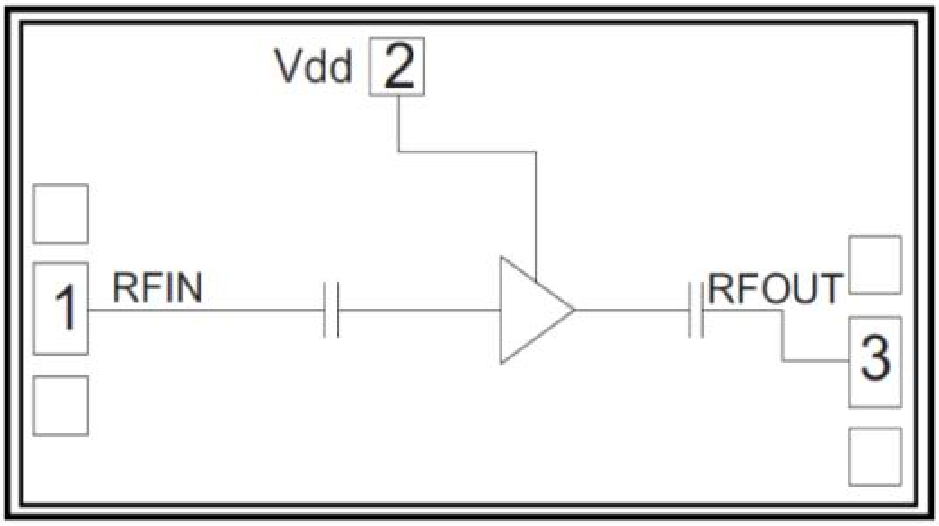
P-1dB VS Frequency



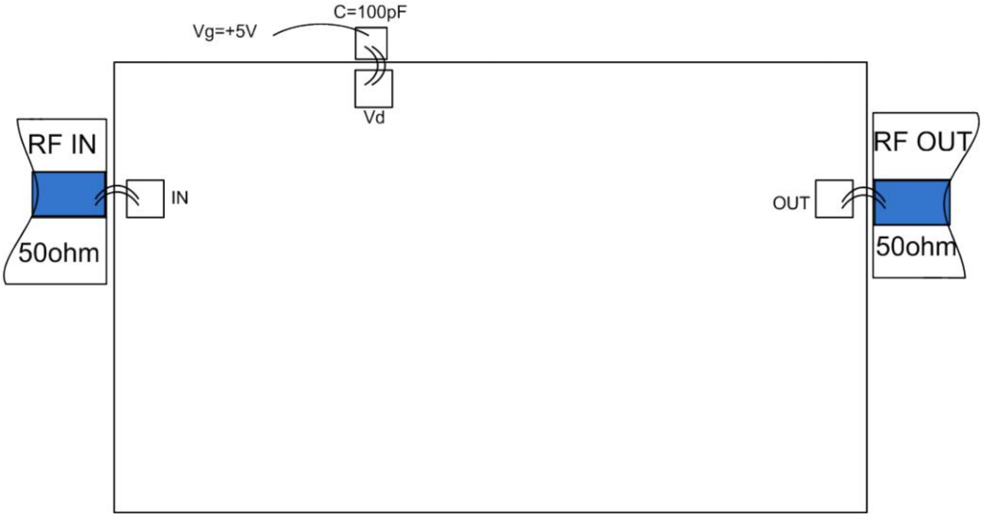
Outline Drawing:(μm)



Functional Diagram：



Assembly Diagram:



Handling Precautions

1.All bare die are placed in either Waffle or Gel based ESD protective containers,all die should be stored in a dry nitrogen environment.
2.Cleanliness: Handle the chips in a clean environment. DO NOT attempt to clean the chip using liquid cleaning systems
3.Follow ESD precautions to protect against ESD strikes
Handle the chip along the edges with a vacuum collet or with a sharp pair of bent

tweezers. The surface of the chip has fragile air bridges and should not be touched with vacuum collet, tweezers, or fingers

4.Eutectic Die Attach: A 80/20 gold tin preform is recommended with a work surface temperature of 255 ° C and a tool temperature of 265 ° C. When hot 90/10 nitrogen/hydrogen gas is applied, tool tip temperature should

5.Epoxy Die Attach: Apply a minimum amount of epoxy to the mounting surface so that a thin epoxy fillet is observed around the perimeter of the chip once it is placed into position. Cure epoxy per the manufacturer’s schedule

6.Ball or wedge bond with 0.025mm (1 mil) diameter pure gold wire. Thermosonic wirebonding with a nominal stage temperature of 150 ° C and a ball bonding force of 40 to 50 grams or wedge bonding force of 18 to 22 grams is recommended. Use the minimum level of ultrasonic energy to achieve reliable wirebonds. Wirebonds should be started on the chip and terminated on the package or substrate. All bonds should be as short as possible <0.31mm (12 mils).