

Key Features :

- Frequency range : 6 – 18GHz
- High gain
- High P-1
- Low cost package
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1205P1 is a high performance GaAs LNA, frequency range covers 6 – 18GHz, +5V single supply, typical gain 20dB.

Absolute Maximum Ratings (Ta = 25°C)

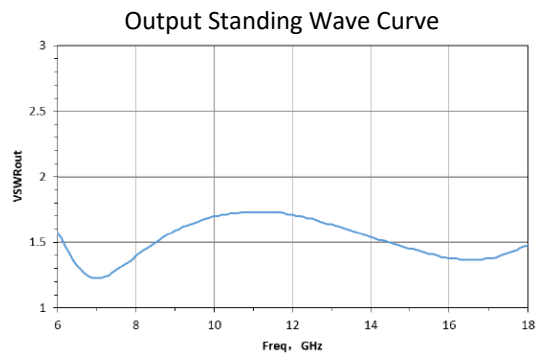
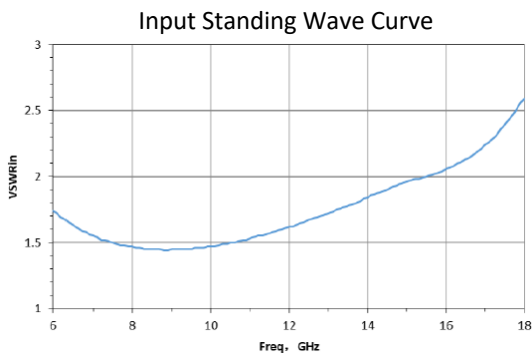
Symbol	Parameter	Value	Remark
Vd	Drain voltage	7V	
Pin	Input signal power	17dBm	
Tch	Operation Temperature	150°C	
Tm	Sintering Temperature	310°C	30s, N ₂ protection
Tstg	Storage Temperature	-65 ~ +150°C	

[1] Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

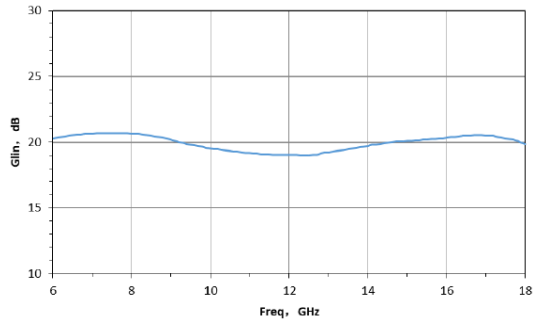
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typical	Max	
Glin	Gain	Vd = +5V F : 6 ~ 18GHz (Chip has 2 types of power supply, P-1 is selectable)	-	20	-	dB
NF	Noise figure		-	2	-	dB
Id	Static current		-	90	-	mA
VSWRi	Input standing wave		-	1.8	2.5	-
VSWRo	Output standing wave		-	1.5	1.8	-
P-1	1dB compression point		-	16@75mA 18@90mA	-	dBm

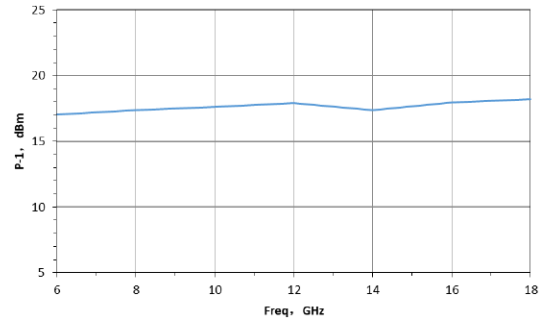
Typical Test Curve (@90mA current)



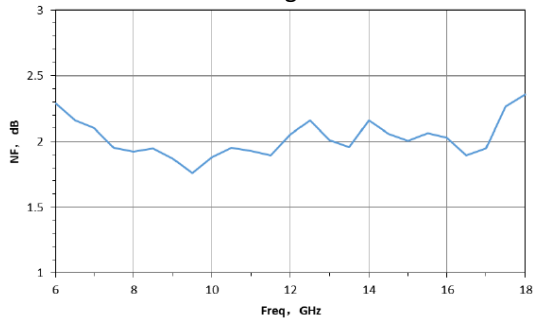
Gain Curve



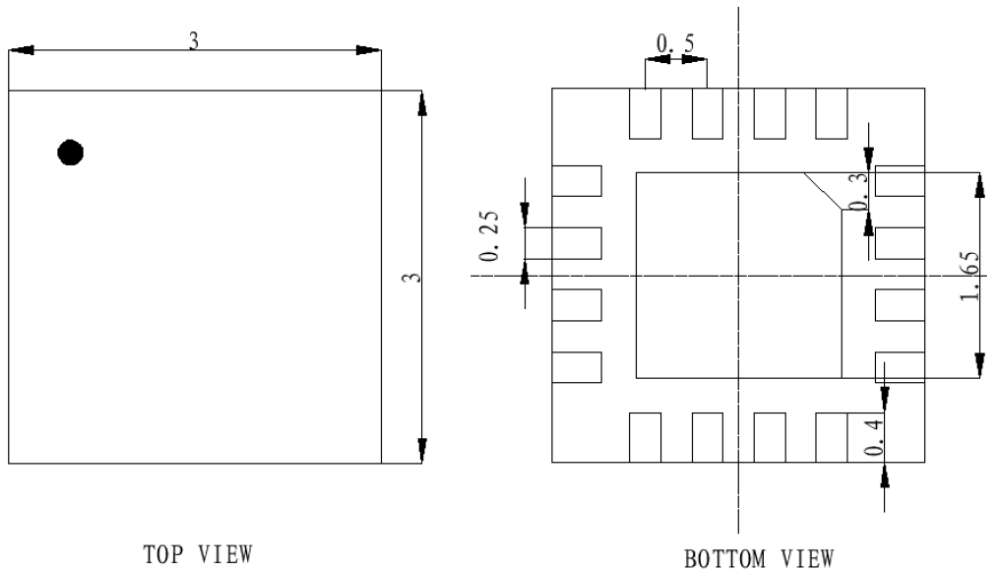
P-1 Curve



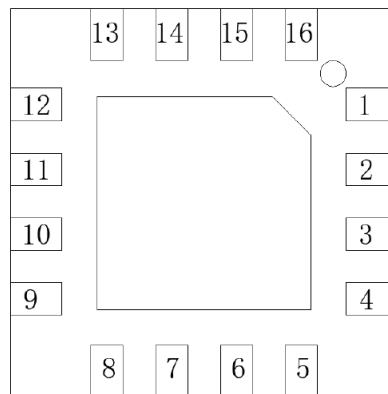
Noise Figure Curve



Dimensions (Unit : mm)



Lead Diagram



Lead	3	10	14	2, 4, 9, 11	Other
Use	RFin	RFout	+5V Supply	GND	Suggest to connect to GND, or not connected.