Features

- Wide frequency band from 1.8 GHz - 6.0GHz
- 8Watts (CW) output Power
- 50ohm input / output impedance
- SMA female connector
- Single +28V power supply

General Description

ABP0600-30-4339 is a wideband solid state power amplifier module, operating over the frequency range from 1.8GHz - 6.0GHz, providing 8Watts of saturated output power (CW) and 40dB of small signal gain, excellent gain flatness and good VSWR at both input and output ports. The amplifier requires only positive DC power supply to operate.

Electrical Specifications @TA=25°C, VDC=28V, 50 Ω System

Items	Parameters	Units	Specifications		
			Minimum	Typical	Maximum
1	Operating Frequency	GHz	1.8		6.0
2	Nominal SS Gain @25°C	dB	37	43	
3	P1dB	dBm	34	37	
4	Saturated Output Power (CW)	dBm	37	39	
5	Gain Flatness	dB		±2	±2.5
6	Noise Figure	dB		5.5	
7	Input Return Loss	dB		-10	
8	Spurious	dBc		-50	
9	Operating Temperature	°C	0		+50
10	Storage Temperature	°C	-25		+70
11	Operating Voltage	V		+28	+30
12	Total Supply Current	A		1.6	
13	Dimension	Inch	4.90 x3.00 x0.86		
14	Weight	lb	0.85		
15	RF in/out connectors		SMA female		

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Absolute Maximum Ratings

Items	Parameters	Units	Specifications
1	Operating Voltage	V	+30
2	RF Input Power	dBm	0
3	Maximum Load VSWR		3:1

Mechanical Structure

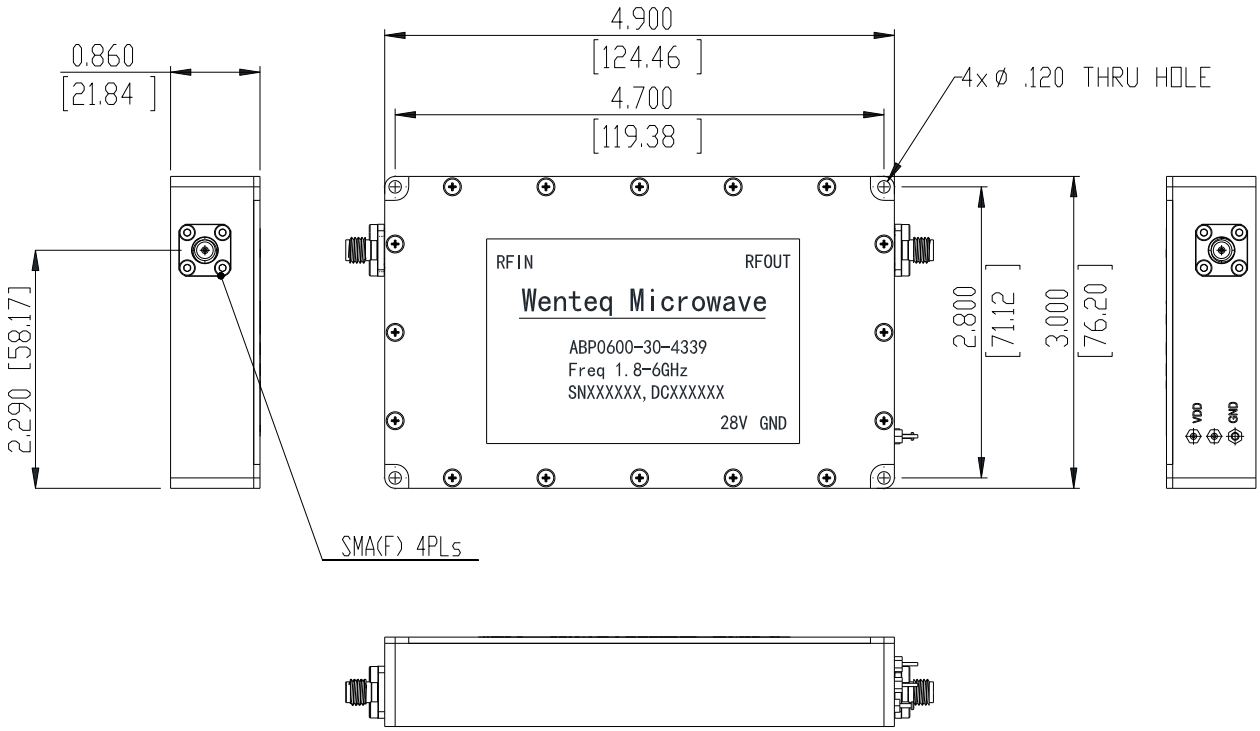


Fig 5. ABP0600-30-4339 broadband mixer outline

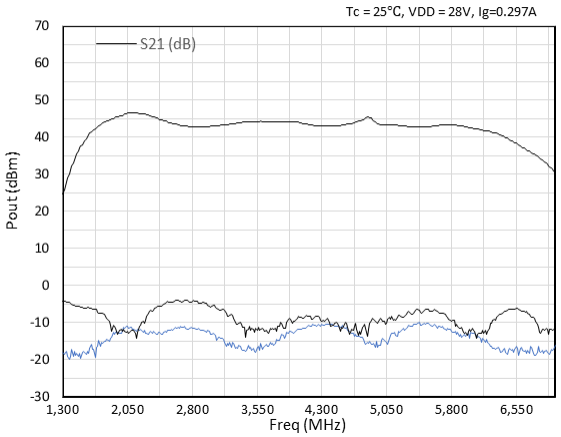
Note: All units are in inches [mm]. All tolerances are +/- 0.005 inch unless otherwise specified

Housing Material and Surface Finish

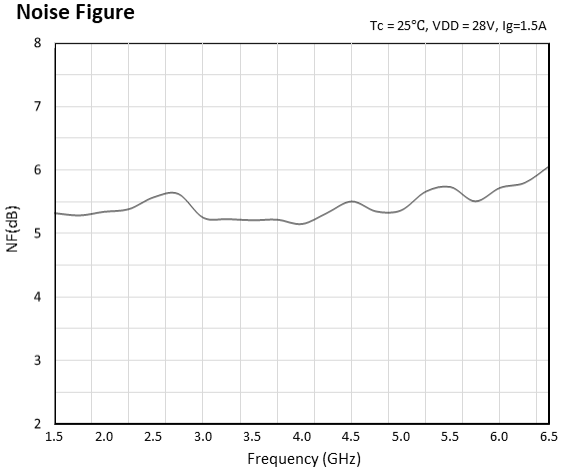
Body and cover material: aluminum
Surface finish: nickel plated
Connector material: Stairless Steel
Connector surface finish: Passivation

Typical Performance

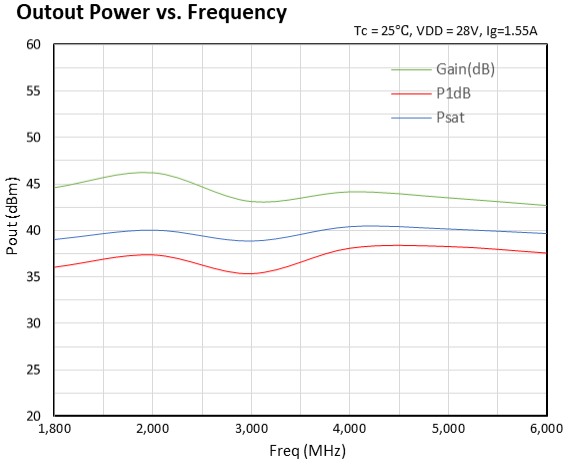
S21, S11, S22 vs. Frequency at small signal



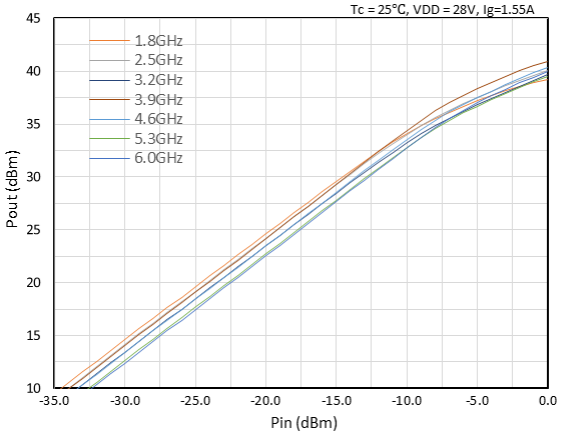
Noise Figure



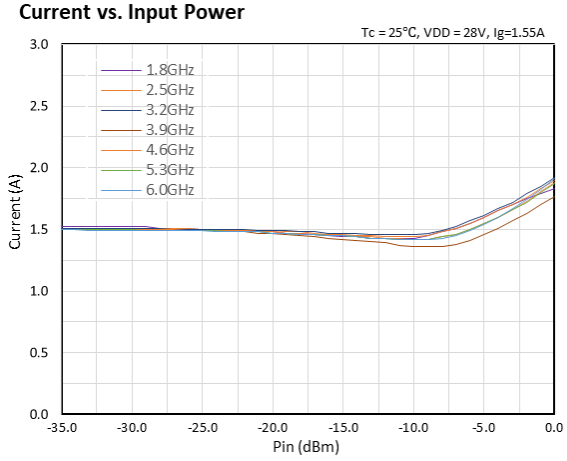
Outout Power vs. Frequency



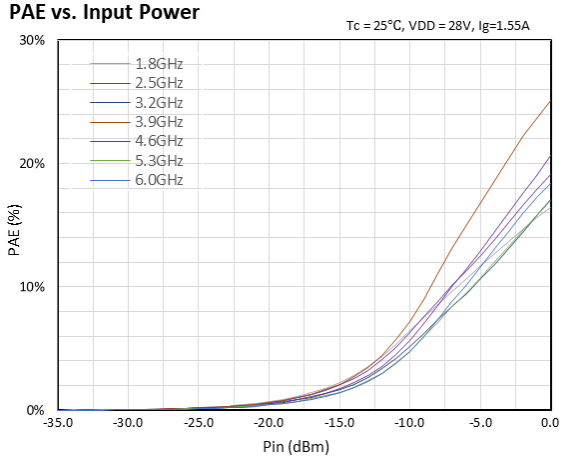
Outout Power vs. Input Power



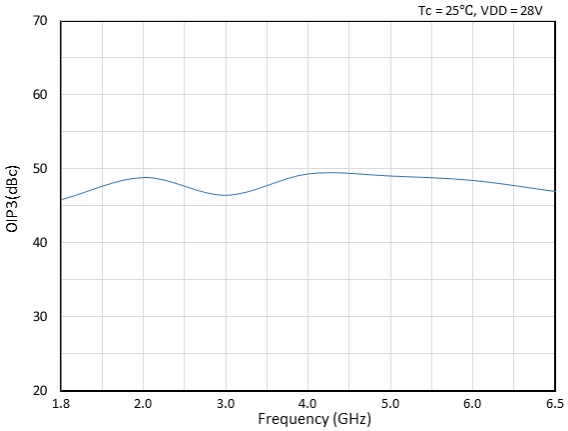
Current vs. Input Power



PAE vs. Input Power



Output 3rd order intercept point



3rd order intermodulation product