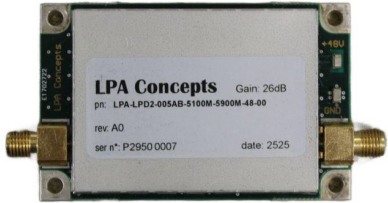
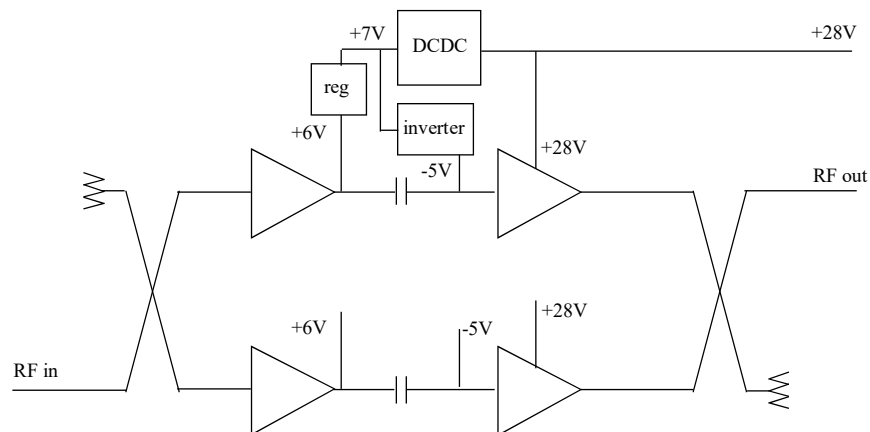


# LPA Concepts

<b>LINEAR POWER DRIVER AMPLIFIER</b>	
<b>P3270</b>	<b>LPA-LPD2-002AA-2000M-6000M-28-00</b>
<b>FEATURES</b> <ul style="list-style-type: none"> <li>◆ 2000-6000MHz</li> <li>◆ Gain: 32 dB / <math>P_{1dB} = 2W</math></li> <li>◆ OIP3 = +44dBm</li> <li>◆ 50Ω input / output</li> <li>◆ 28V / 380mA</li> <li>◆ Aluminum flange</li> </ul>	<p style="text-align: center;"><b>PACKAGE</b></p> <div style="text-align: center;">  </div> <p style="text-align: center;">LPD2 package</p> <p style="text-align: center;"><b>APPLICATIONS</b></p> <ul style="list-style-type: none"> <li>◆ General purpose</li> </ul>

## BLOCK DIAGRAM



Specifications and information are subject to change without notice

# LPA Concepts

## Electrical characteristics: 50 ohms; +28V; -25°C to +80°C (1, 2)

Ref	Parameter	Conditions	Note	Min	Typ	Max	Units
1	Bandwidth			2000		6000	MHz
2	Gain small signal	4000 MHz; 50°C			33		dB
3	Gain variation vs frequency	2000 MHz - 6000 MHz			2	4	dBpp
4	Gain variation vs temperature	-25°C to +80°C	2		3		dB
5	Input return loss	50 ohms				-15	dB
6	Output return loss	50 ohms				-15	dB
7	P-1dB	2-6GHz		1.5	2		W
8	Peak envelope power	IMD3 = -30 dBc, f=4000 MHz	3	1	1.5		W
9	Output 3 <sup>rd</sup> order intercept point	2 tones +16dBm each			+44		dBm
10	Current consumption	Pout < 1W			0.38		A
11	Max current	Shut down current			0.55		A

1. Unless otherwise specified
2. Housing temperature
3. 2 CW, tone spacing 5MHz

## Maximum ratings

Ref	Parameter	Conditions	Note	Min	Nom	Max	Units
1	Operating temperature	flange temperature		-40°C		+80	°C
2	Supply voltage			24	28	32	V
3	Input peak power					+8	dBm
4	Input average power					+8	dBm
5	Max load VSWR	at 2W output			10:1		

## Power Supply DC Connection

Pin description			
Terminal 2 : Supply +28V		SMD LOOP TERMINAL	3.3mm x 1.85mm x 2.0mm
Terminal 1 : Gnd			

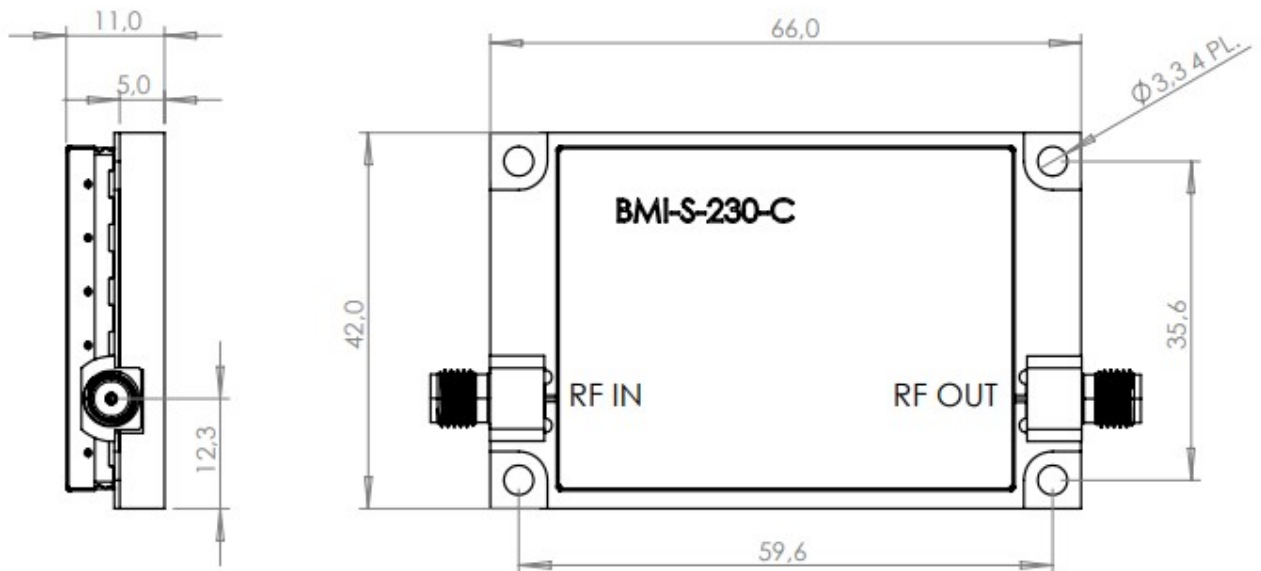
Specifications and information are subject to change without notice

# LPA Concepts

## Mechanical characteristics

Ref	characteristic	description	remarks
1	Package dimensions	66mm x 42mm x 11mm	
2	Flange dimensions	66mm x 42mm x 5mm	4 x M3 screws for heatsink attach
3	Input/output RF connectors	SMA	
4	DC supply connection	SMD Loop terminal	For hook clip (Minigrabber or Micrograbber)
5	Weight	60 grams	

## Package outline:

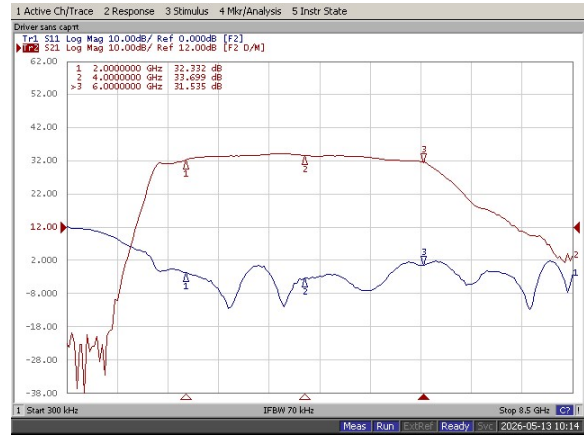


dimensions are in mm

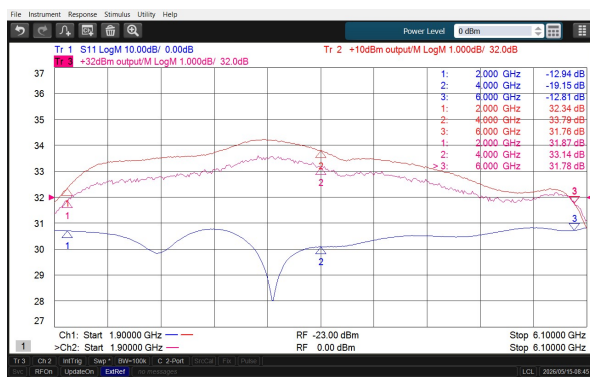
## TYPICAL PERFORMANCE



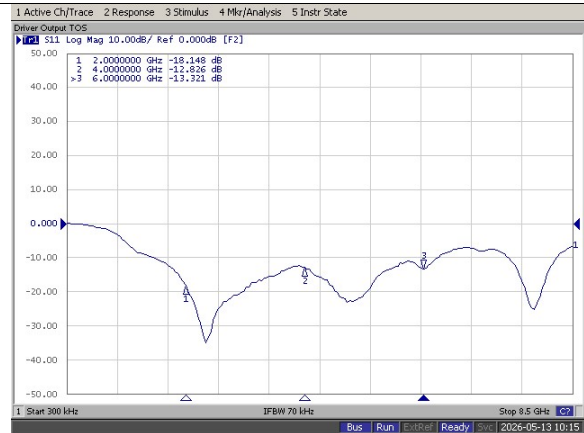
Gain vs Frequency 1dB/div



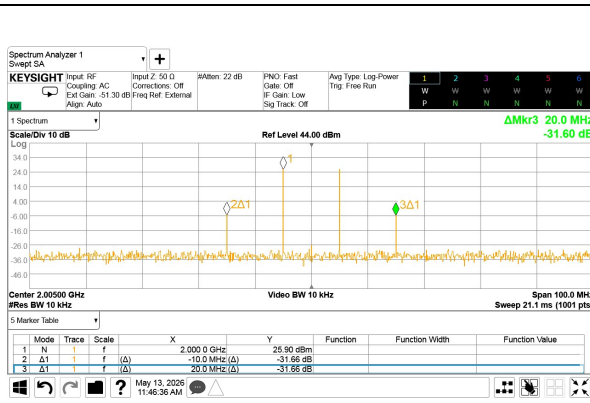
Gain vs Frequency 10dB/div



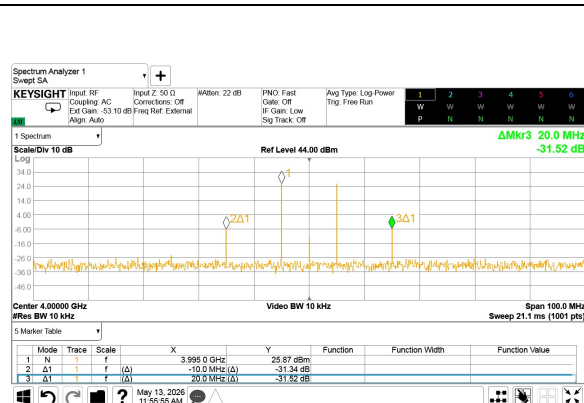
Gain compression at 1.5W out



Output Return Loss vs Frequency



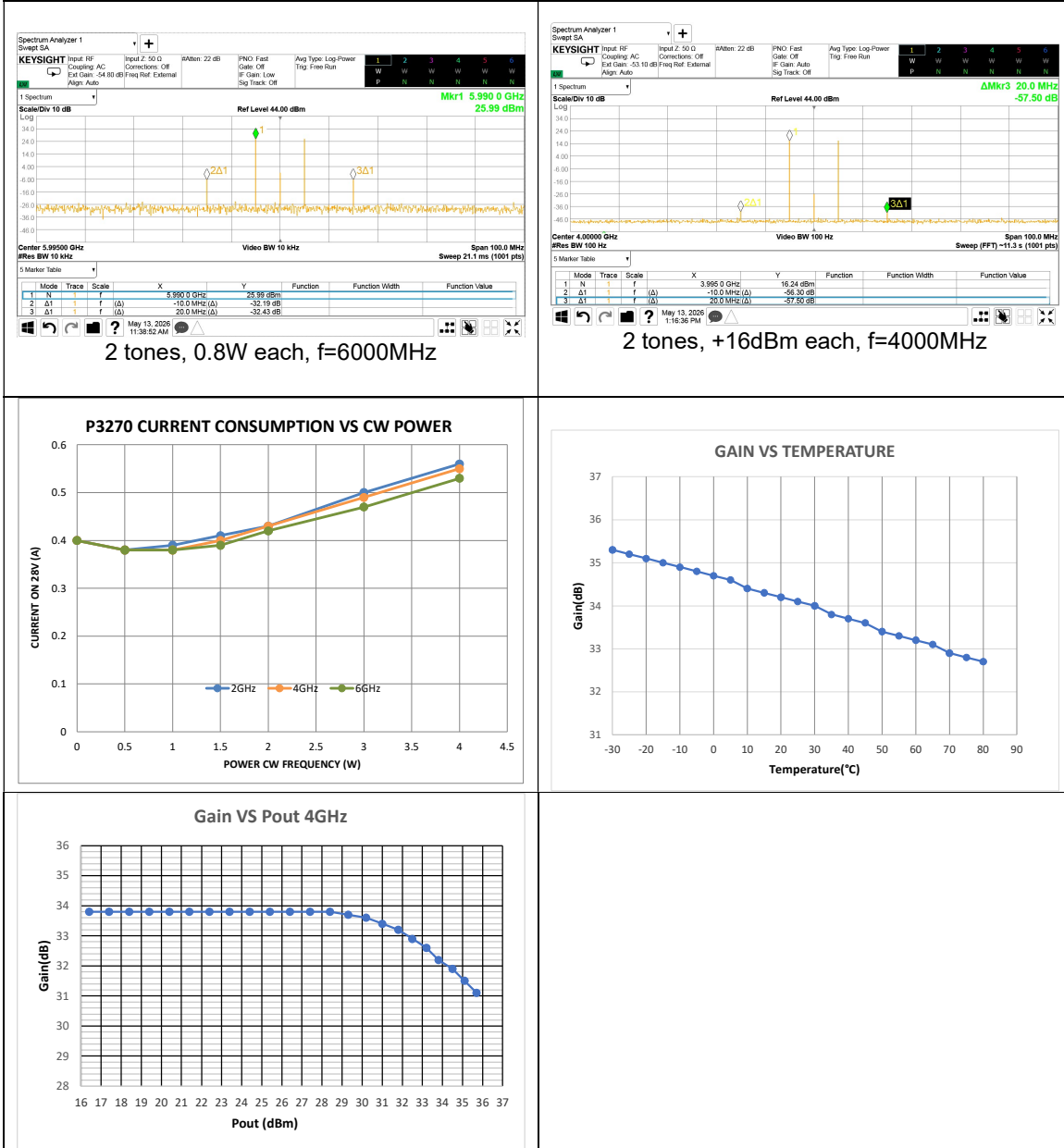
2 tones, 0.8W each, f=2000MHz



2 tones, 0.8W each, f=4000MHz

Specifications and information are subject to change without notice

## TYPICAL PERFORMANCE (continued)



Specifications and information are subject to change without notice