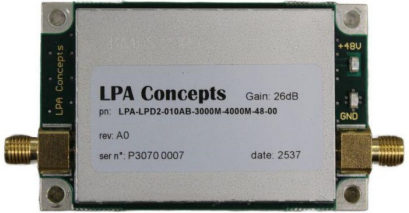
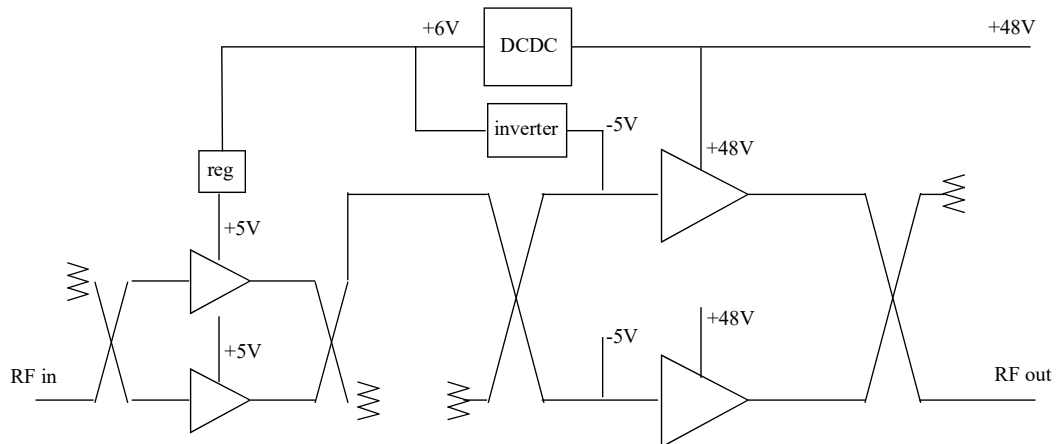


LPA Concepts

LINEAR POWER DRIVER AMPLIFIER	
P3070	LPA-LPD2-010AB-3000M-4000M-48-00
FEATURES <ul style="list-style-type: none"> ◆ 3000-4000MHz ◆ Gain: 27 dB / $P_{pep} = 10W$ ◆ 50Ω input / output ◆ 48V / 80mA idle ◆ 48V / 0.65A @ 10W CW ◆ Aluminum flange ◆ Low cost 	<p style="text-align: center;">PACKAGE</p> <div style="text-align: center;">  </div> <p style="text-align: center;">LPD2 package</p> <p style="text-align: center;">APPLICATIONS</p> <ul style="list-style-type: none"> ◆ General purpose

BLOCK DIAGRAM



Specifications and information are subject to change without notice

LPA Concepts

Electrical characteristics: 50 ohms; +48V; -25°C to +80°C (1, 2)

Ref	Parameter	Conditions	Note	Min	Typ	Max	Units
1	Bandwidth			3000		4000	MHz
2	Gain small signal	3500 MHz; 50°C			27		dB
3	Gain variation vs frequency	3000 MHz - 4000 MHz			1	2	dBpp
4	Gain variation vs temperature	-25°C to +80°C	2		2		dB
5	Input return loss	50 ohms				-15	dB
6	Output return loss	50 ohms				-15	dB
7	Peak envelope power	IMD3 = -30 dBc, f1=3497.5 MHz f2=3502.5MHz	3	10	11		W
8	Current consumption idle	On 48V			0.08		A
9	Current consumption 10W	CW frequency 3500MHz			0.65		A
10	Max supply current	Shut down current	4		0.8		A
11	Max temperature	Shut down temperature	5		80		°C

1. Unless otherwise specified
2. Housing temperature
3. 2 CW, tone spacing 5MHz
4. On/Off to reset
5. Auto restart at 70°C

Maximum ratings

Ref	Parameter	Conditions	Note	Min	Nom	Max	Units
1	Operating temperature	flange temperature		-40°C		+80	°C
2	Supply voltage			46	48	50	V
3	Input peak power					+15	dBm
4	Input average power					+15	dBm
5	Load VSWR	At 10W max			10:1		

Power Supply DC Connection

Pin description			
Terminal 2 : Supply +48V		SMD LOOP TERMINAL	3.3mm x 1.85mm x 2.0mm
Terminal 1 : Gnd			

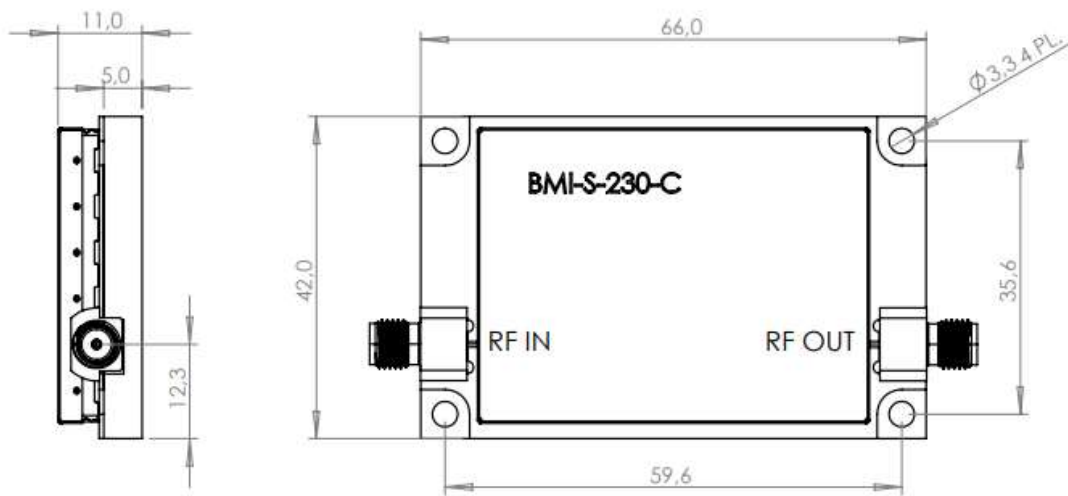
Specifications and information are subject to change without notice

LPA Concepts

Mechanical characteristics

Ref	characteristic	description	remarks
1	Package dimensions	66mm x 42mm x 11mm	
2	Flange dimensions	66mm x 42mm x 5mm	3 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	

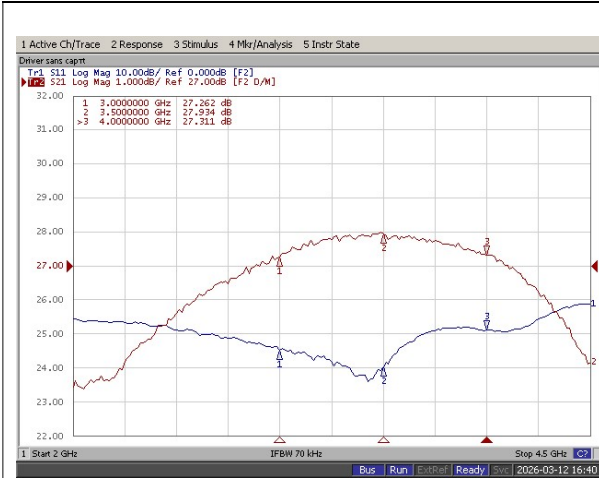
Package outline:



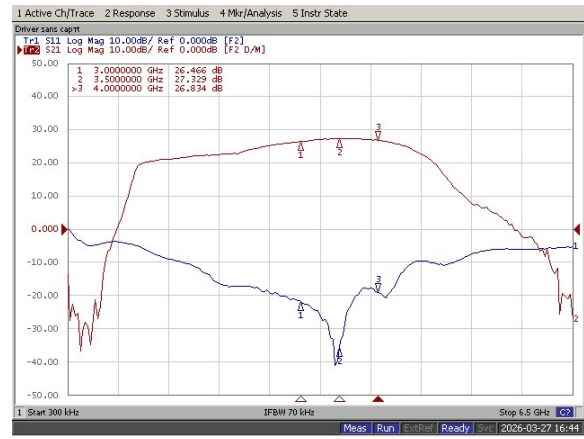
dimensions are in mm

LPA Concepts

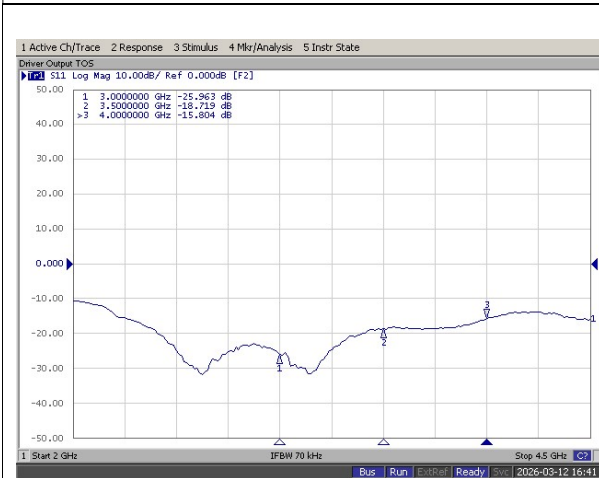
TYPICAL PERFORMANCE



Gain vs Frequency



Wideband Gain vs Frequency



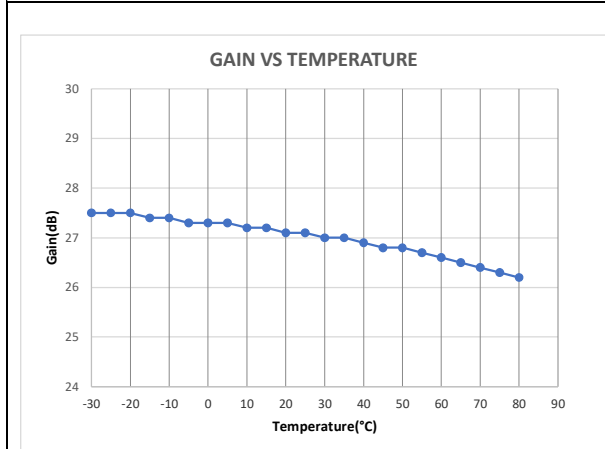
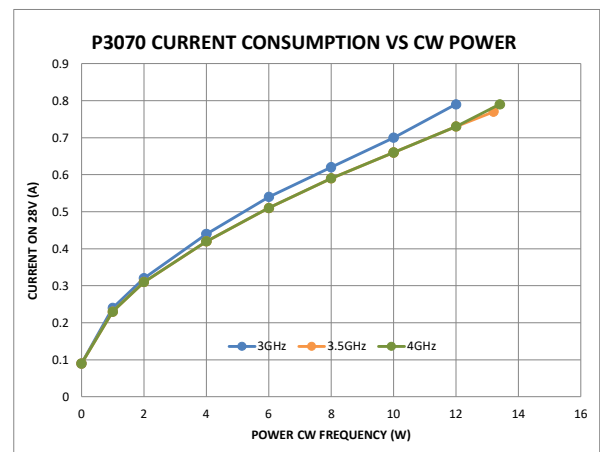
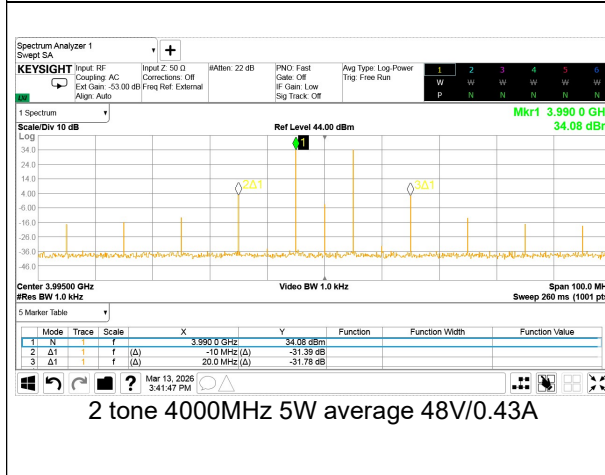
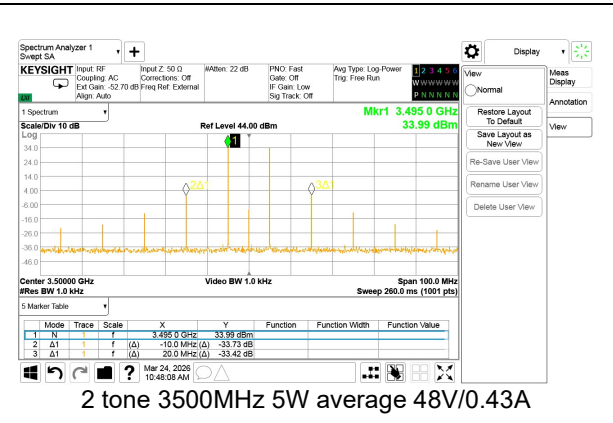
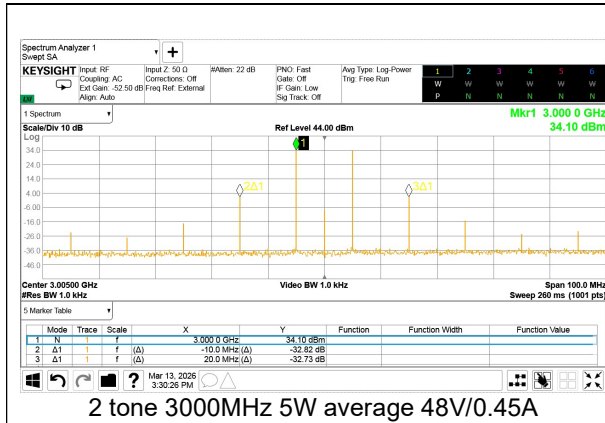
Output Return Loss vs Frequency



Gain compression at 10W out

Specifications and information are subject to change without notice

TYPICAL PERFORMANCE (continued)



Specifications and information are subject to change without notice