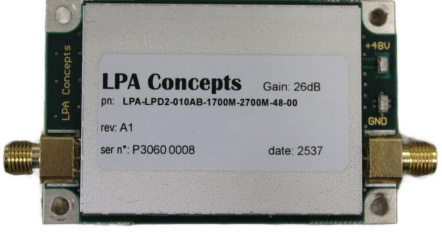
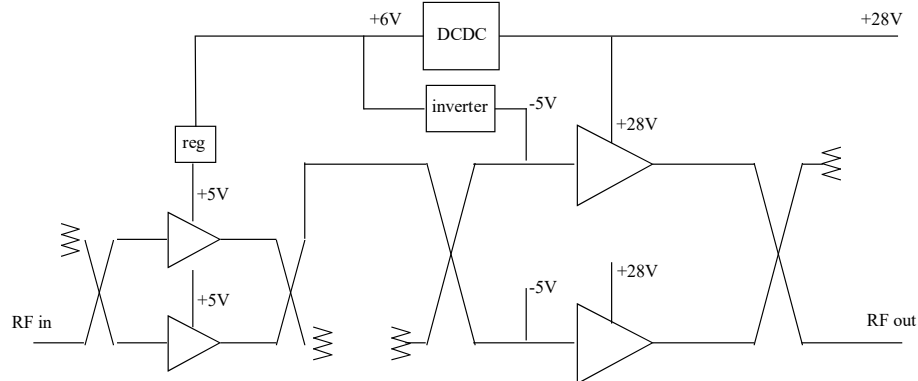


LPA Concepts

LINEAR POWER DRIVER AMPLIFIER	LPA-LPD2-003AA-1700M-2700M-28-00
P3130	
FEATURES <ul style="list-style-type: none"> ◆ 1700-2700MHz; Class A ◆ Gain: 31 dB ◆ 50Ω input / output ◆ P_{pep} = 3W ; OIP3=+44dBm ◆ 28V / 0.5A ◆ 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



LPA Concepts

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

Ref	Parameter	Conditions	Note	Min	Typ	Max	Units
1	Bandwidth			1700		2700	MHz
2	Gain small signal	2200 MHz; 50°C			31		dB
3	Gain variation vs frequency	1700 MHz - 2700 MHz			1	2	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	Peak envelope power	IMD3 = -27dBc, f1=2195 MHz f2=2205MHz			3		W
8	Output 3 rd order Intercept point	f1=2195 MHz f2=2205MHz ; 2 x 20dBm			45		dBm
9	Current consumption	Output < 1W ; 28V			0.5		A
10	Current consumption	Output=3W			0.45		A
11	Maximum current	Shut down current	3		0.7		A
12	Max temperature	Shut down temperature	4		80		°C

1. Unless otherwise specified
2. Housing temperature
3. On/Off to reset
4. 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		5, 6	20	28	30	V
3	Input average power		7			+4	dBm
4	Max load VSWR	At 3W out				10:1	

5. Shut down above 30V
6. No start if reverse voltage
7. Shut down if output power >7W

Power Supply DC Connection

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

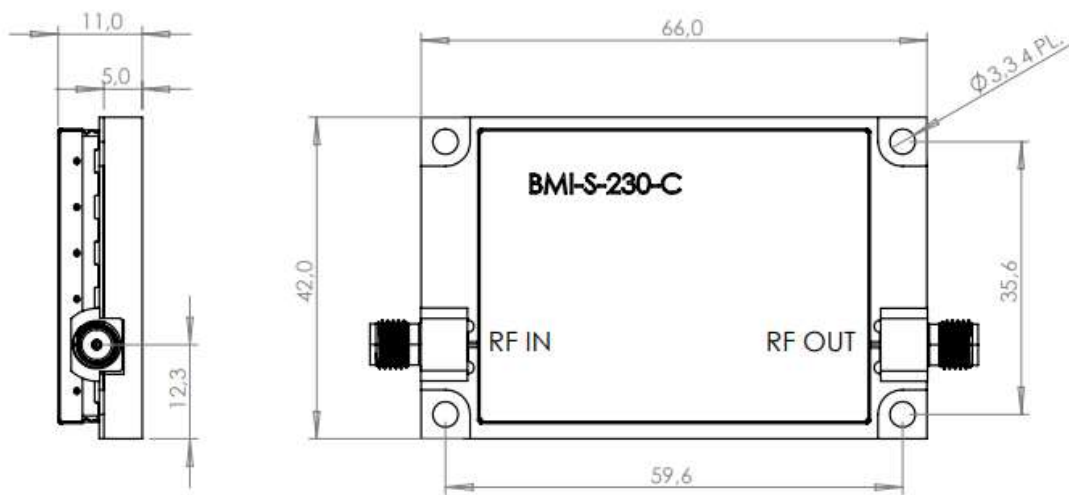
Specifications and information are subject to change without notice

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 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

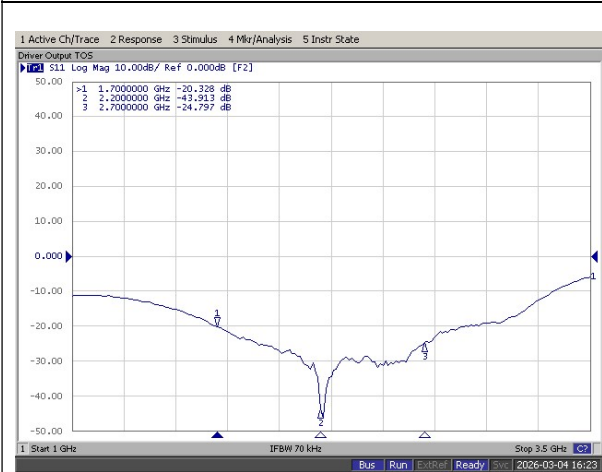
TYPICAL PERFORMANCE



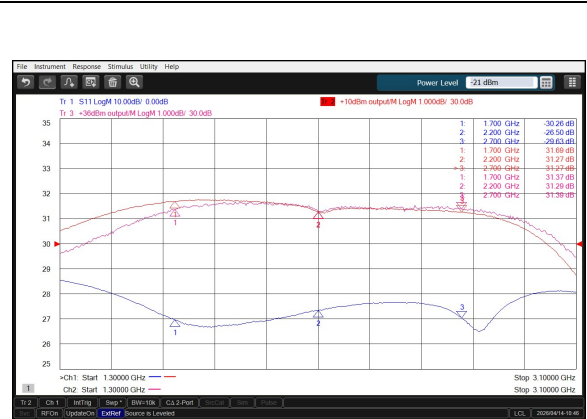
Gain & input return loss vs frequency



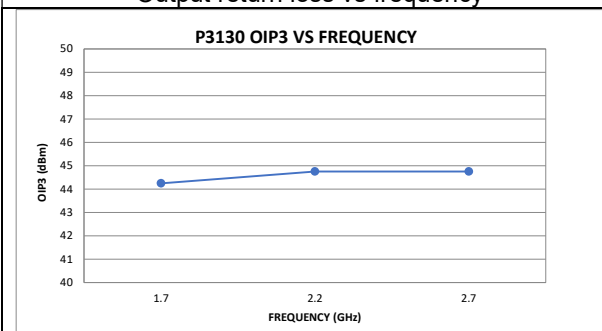
Wideband gain vs frequency



Output return loss vs frequency



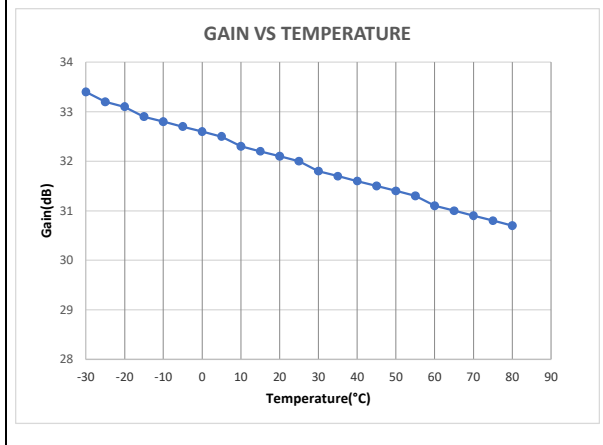
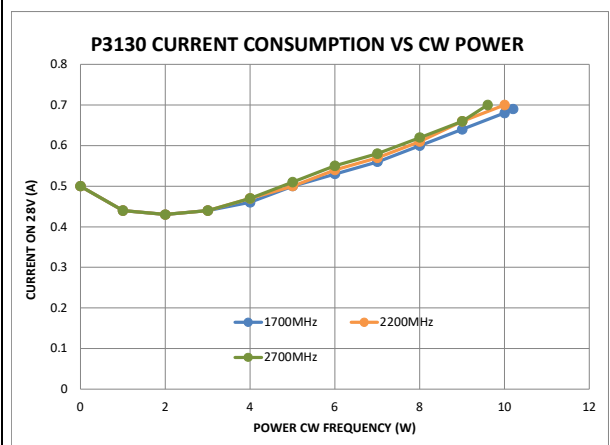
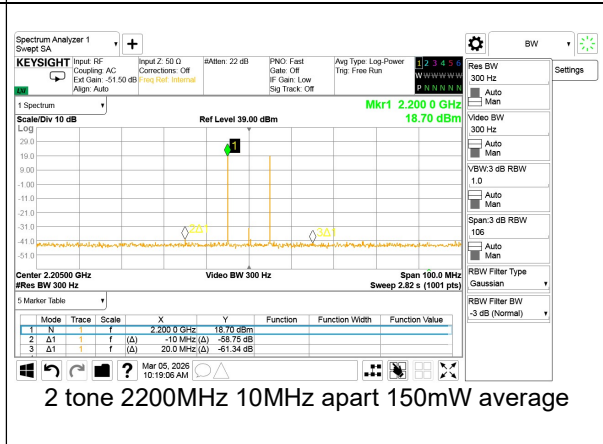
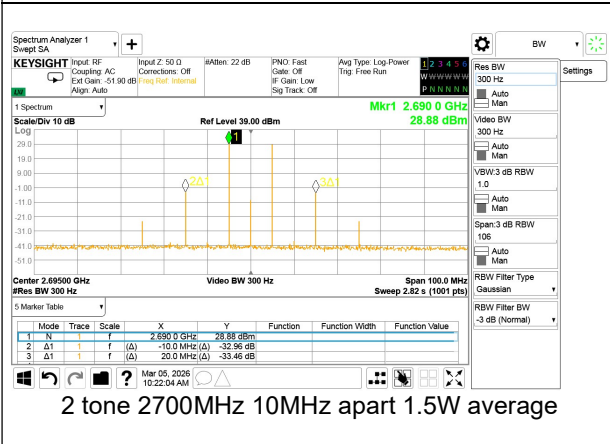
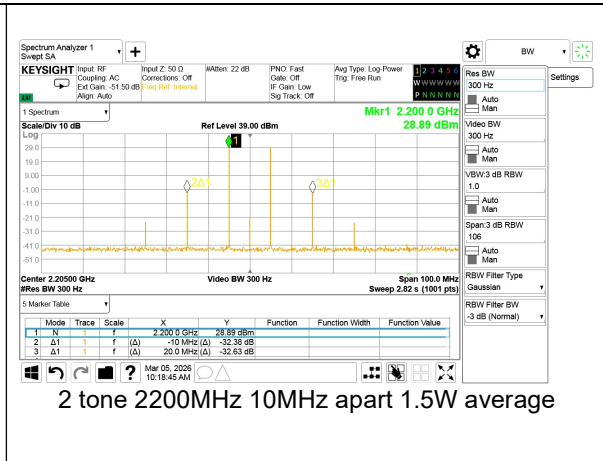
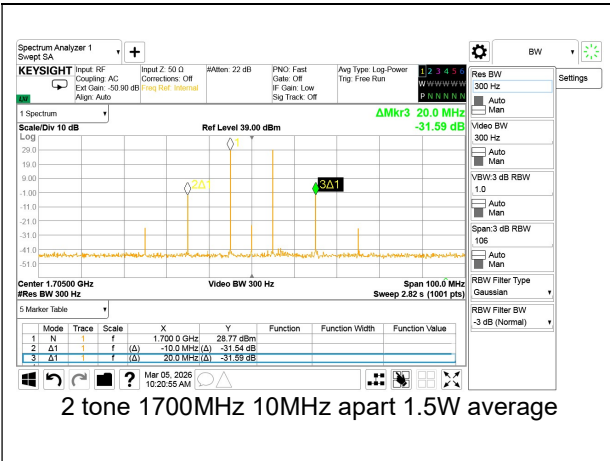
Gain compression at 4W



P3130 OIP3 VS FREQUENCY

Specifications and information are subject to change without notice

TYPICAL PERFORMANCE (continued)



Specifications and information are subject to change without notice