#### **Linear Amplifier GLM2123-L**

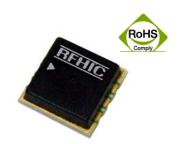


### **Product Features**

- GaAs MESFET + InGaP HBT
- No matching circuit needed
- High IP3
- Surface Mount Hybrid Type & Reel Packing
- Small Size
- Alumina Substrate
- Pb Free / RoHS Standard

### **Applications**

- PCS Repeater
- RF Sub-Systems
- Base Station



Package: CP-16B

## **Descriptions**

It is one of the smallest matched Amplifiers.

This family of High gain Linear Amplifier has superior performance comes with a modest price tag

### **Electrical Characteristics**

### **Absolute Minimum and Maximum Ratings**

PARAMETER	UNIT	MIN	MAX
Device Voltage	VDC		
RF Input Power	dBm		+7
Storage Temperature	$^{\circ}$	-40	+125

# **Operating Ranges**

1 0 0					
PARAMETER	UNIT	MIN	TYP	MAX	
Operating Frequency	MHz	1800	-	2200	
Device Voltage	VDC	-	+5		
Case Temperature	$^{\circ}$				

### **Electrical Specifications**

 $(Ta=+25\,^{\circ}C, V_{DD}=+5V, F=2140MHz)$ 

PARAMETER	UNIT	MIN	ТҮР	MAX
Gain	dB		26.6	
Input Return Loss	dB		-25	
Output Return Loss	dB		-18	
Output IP3	dBm	38	42	
1dB Compression Point	dBm		22	
Noise Figure	dB		5.9	
DC Current	mA		200	
Supply Voltage	VDC		+5	
Thermal Resistance(Rth)	°C/W			

OIP3 is measured with two tones, at an output power of 10dBm/tone separated by 1MHz

- rfsales@rfhic.com
- Version 6.0

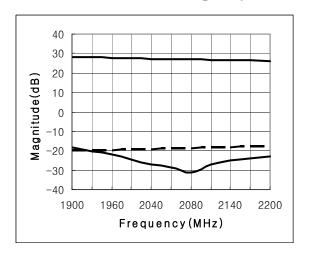
• All specifications may change without notice.



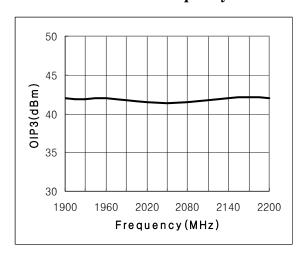
## **Performance Charts** (V<sub>d</sub>=5V, I<sub>d</sub>=200mA, T<sub>c</sub>=25 °C)

Frequency	MHz	1900	1960	2020	2080	2140	2200
Gain	dB	28.2	27.6	27.1	26.9	26.6	26.1
S11	dB	-18	-22	-27	-31	-25	-23
S22	dB	-20	-20	-19	-18	-18	-17
OIP3	dBm	42	42	41.5	41.5	42	42
P1dB	dBm	22	21.9	22	22	22	22.1
Noise Figure	dB	5.9	5.8	5.8	5.9	5.9	5.9

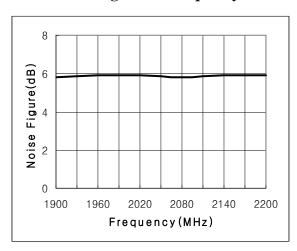
## S-Parameter vs. Frequency



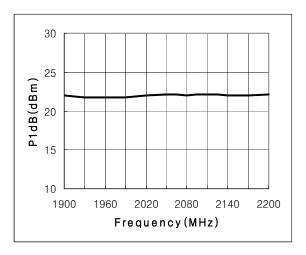
## **OIP3 vs. Frequency**



## Noise Figure vs. Frequency



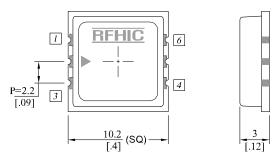
## P1dB vs. Frequency



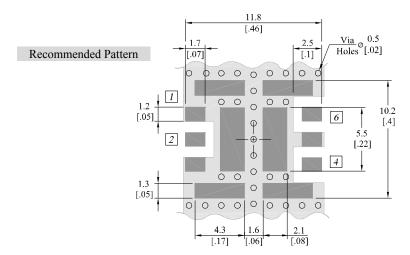
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Package Dimensions (Type: CP-16B)



Unit: mm [inch]	Tolerance: $\pm \frac{0.2}{.008}$	
Pin No.	Function	
1, 3, 5	Ground	
2	Input	
4	Vec	
6	Output	



Same Package Platform for Below Part Numbers

GLM0921-L / GLM1521-L / GBM1821-L / GLM2121-L GLM2521-L / GLM2123-L / GLM2723-L / GLM3623-L 2LM0905-L / 2LM2105-L

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