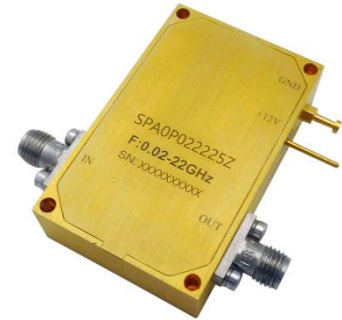


## Features

- Gain: 30dB Typical
- Output power + 28dBm typical
- High P1dB: + 25dBm Full Band
- Supply Voltage: + 12 V @ 650mA
- 50 Ohm Matched



## Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT  
Fiber Optics

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.02		0.3	0.3		12	12		22	GHz
Gain	24	30	32	26	30	32	25	28	31	dB
Gain Flatness		±2.0	±3.0		±2.0	±2.5		±0.8	±1.5	dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.0			±1.0			±1.0		dB
Input VSWR		1.4	1.8		1.4	1.8		1.5	1.8	: 1
Output VSWR		2			1.8			1.5	2.0	: 1
Output 1dB Compression Point (P1dB)		25.5		26	28		24	27		dBm
Saturated Output Power (Psat)		28			30			29		dBm
IM3		20			20			20		dBc
Supply Current (Vcc=+12V)		650	1000		650	1000		650	1000	mA
Isolation S12		-65			-65			-60		dB

Weight	Net	4 Max ounces	Impedance	50 ohms
	Including Heat Sink	8.8 Max ounces		
Input / Output Connectors	SMA-Female		Material	Copper
Finish	Gold plated	Package Sealing	Epoxy Sealed (Standard)	
			Hermetically Sealed (Option with extra charge)	

**SALUKI TECHNOLOGY INC. Ultra Wide Band Power Amplifier 0.02GHz~22GHz**

**Absolute Maximum Ratings**

Operating Voltage	+15V
RF Input Power (RFIN)	+10dBm

**Biassing Up Procedure**

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

**Power OFF Procedure**

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

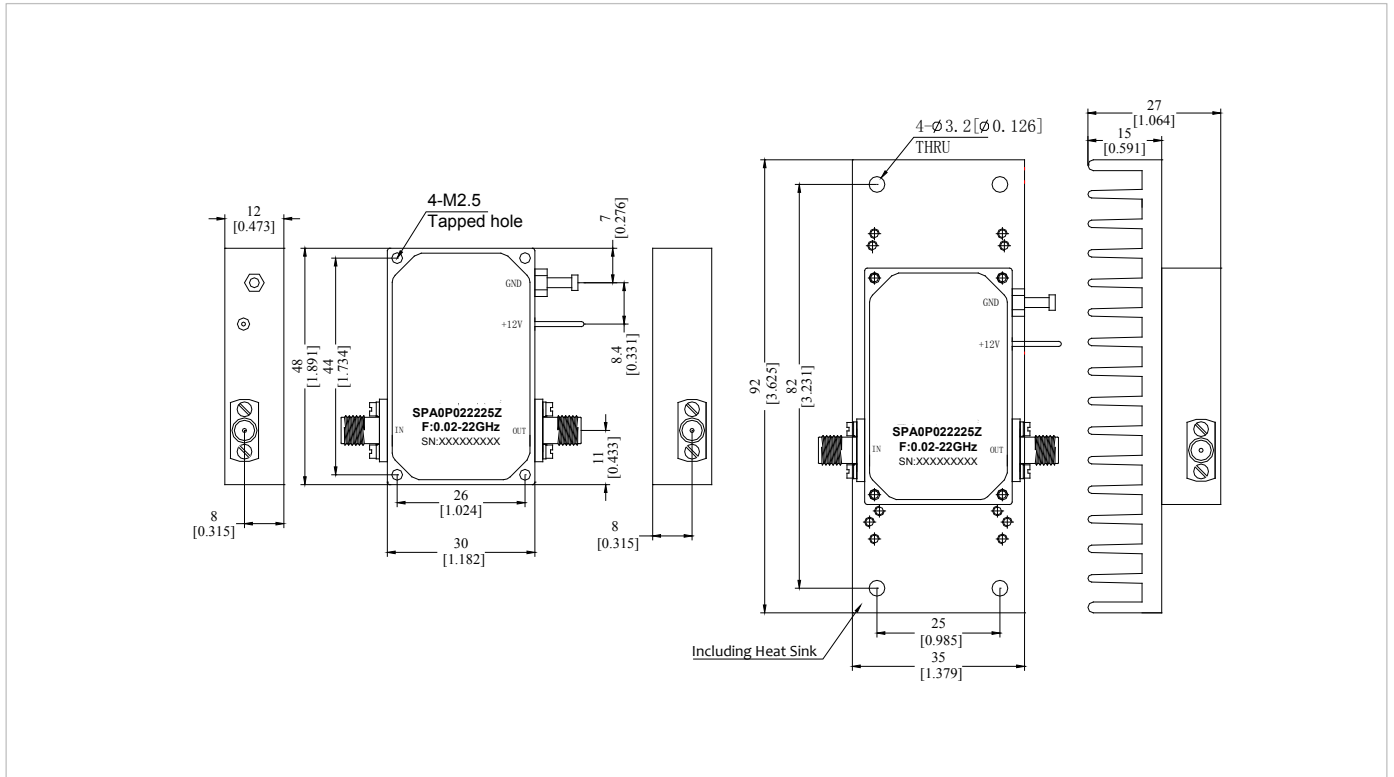
**Environmental Specifications**

Operational Temperature	-40°C~+85°C (Case Temperature )
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

**Outline Drawing:**

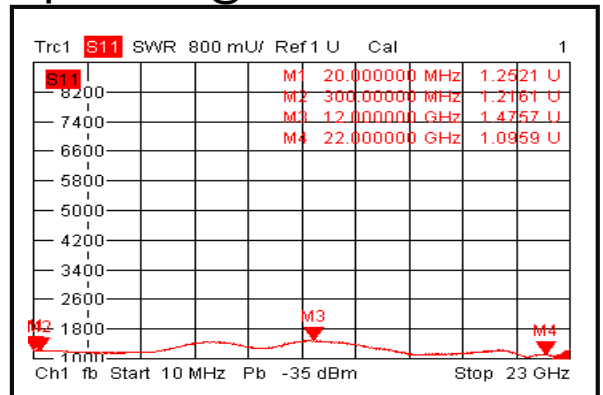
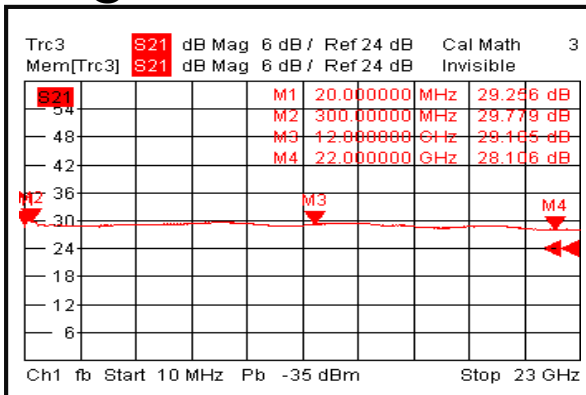
All Dimensions in mm (inches)  
Tolerances ±0.1 (0.004)  
(Excl Heat Sink)

Heat Sink required during operation(Sold Separately)

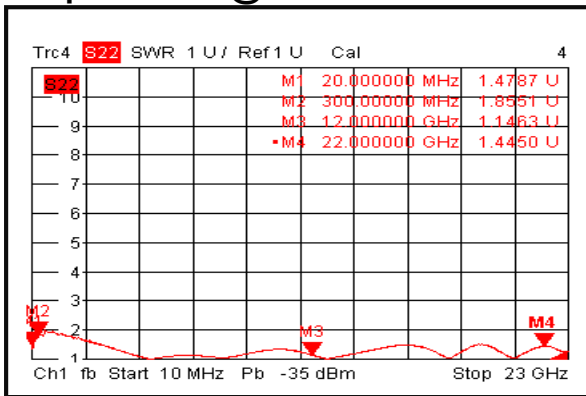


**SALUKI TECHNOLOGY INC.**  
Gain @+25°C

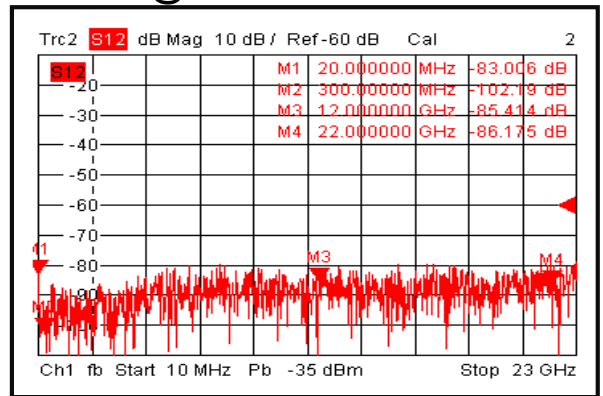
Ultra Wide Band Power Amplifier 0.02GHz~22GHz  
Input VSWR @+25°C



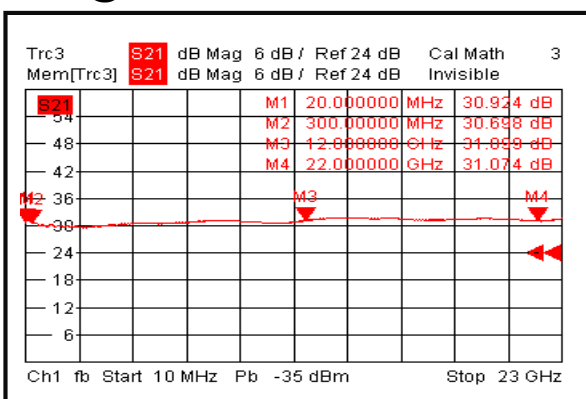
Output VSWR @+25°C



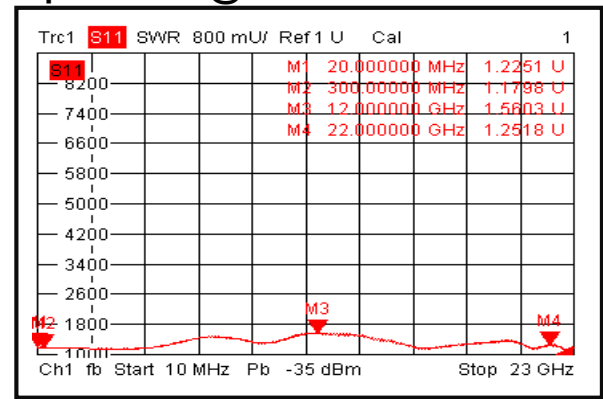
Isolation @+25°C



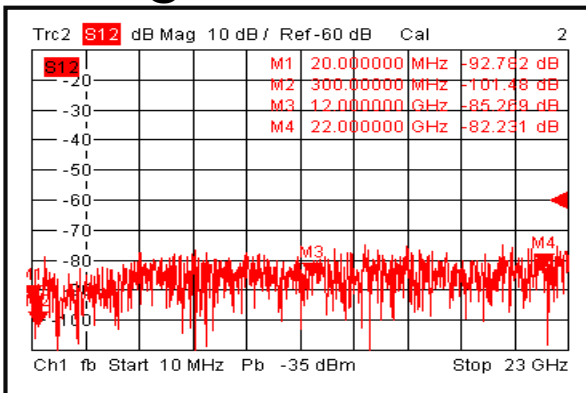
Gain @-40°C



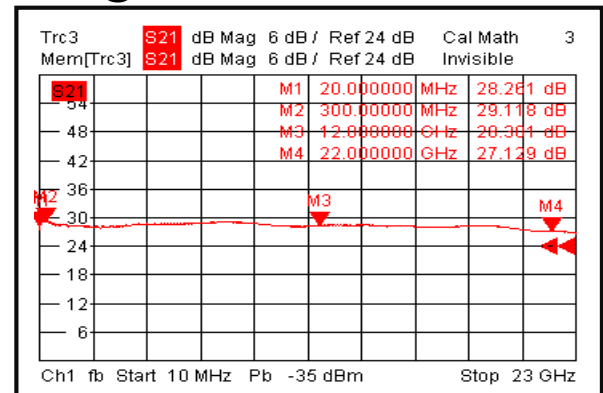
Input VSWR @-40°C



Isolation @-40°C



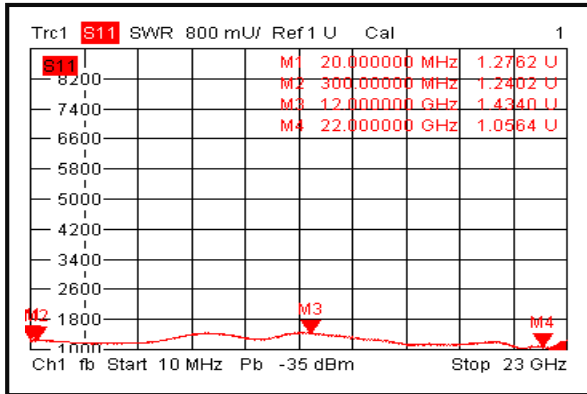
Gain @+85°C



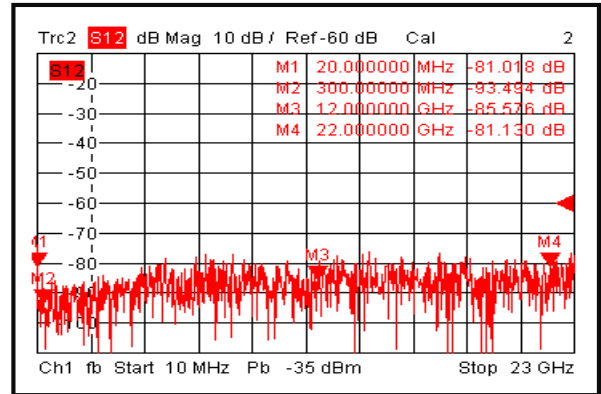
**SALUKI TECHNOLOGY INC.**

**Ultra Wide Band Power Amplifier 0.02GHz~22GHz**

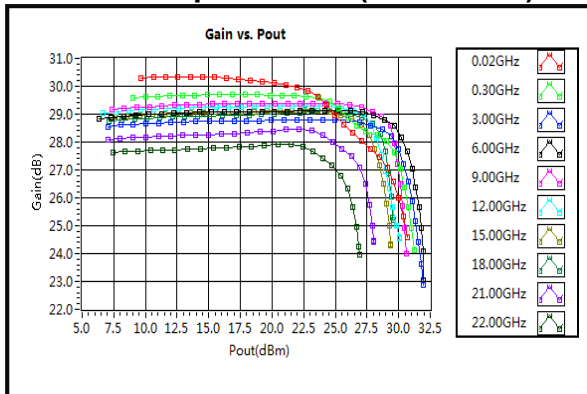
**Input VSWR @+85°C**



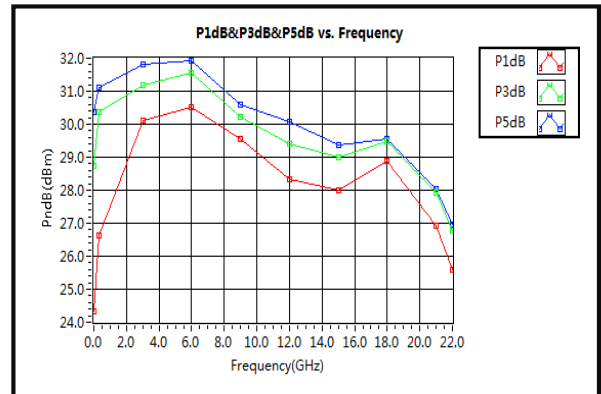
**Isolation @+85°C**



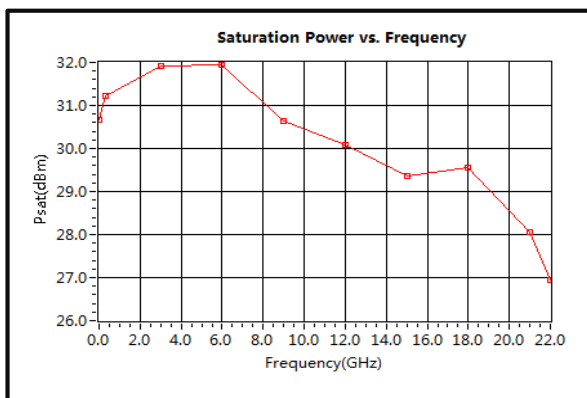
**Gain vs. Output Power (CW Power)**



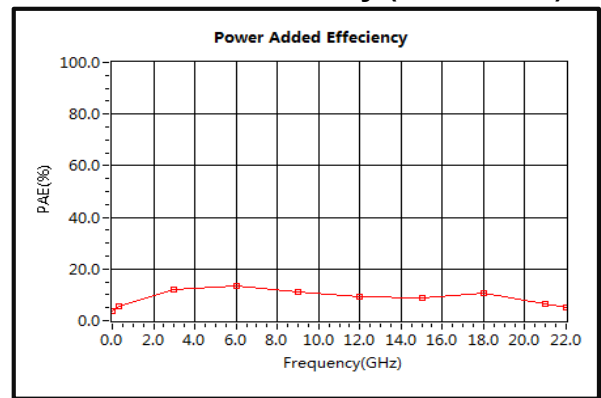
**PndB vs. Frequency (CW Power)**



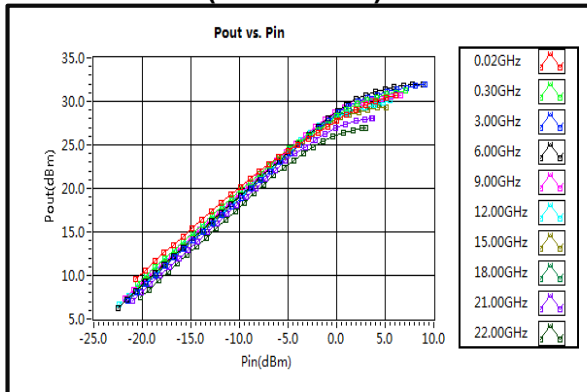
**Saturation Power vs. Frequency (CW Power)**



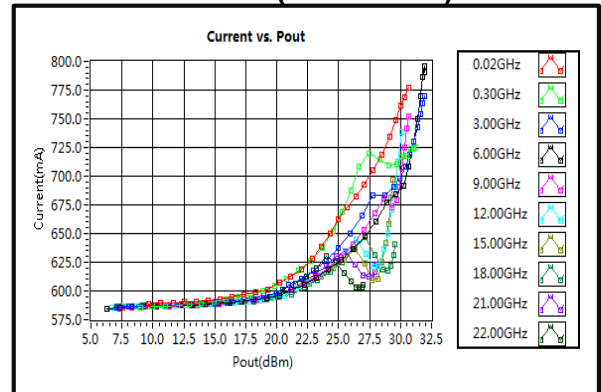
**Power Added Efficiency (CW Power)**



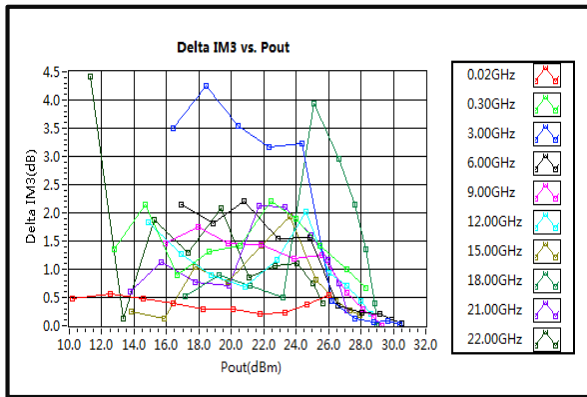
**Pout vs. Pin (CW Power)**



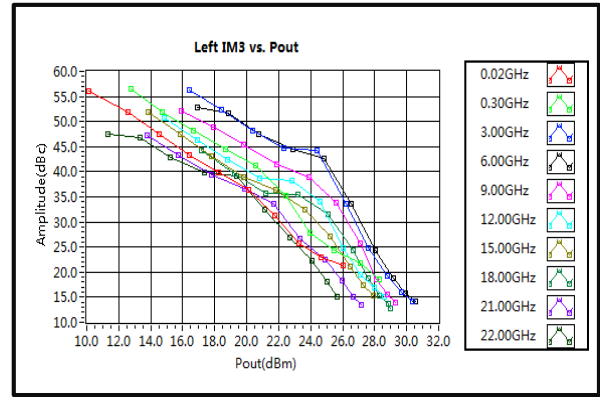
**Current vs. Pout (CW Power)**



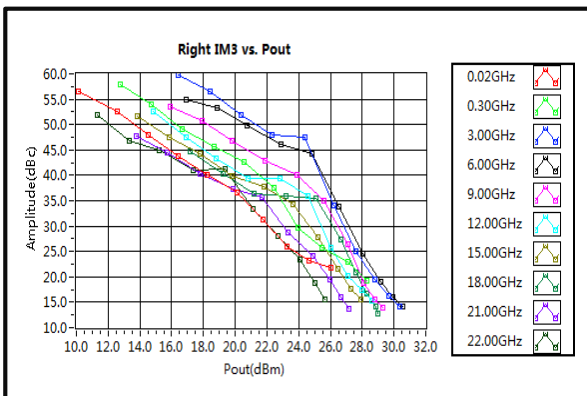
Delta IM3 vs. Pout



Left IM3 vs. Pout



Right IM3 vs. Pout



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