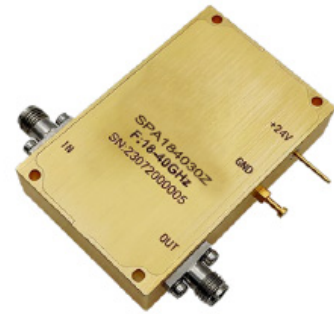


1W Wide Band Power Amplifier 18GHz~40GHz
Features

- Wide Band Power Amplifier
- Gain: 35dB Typical
- Output Power: +30dBm Typical
- Supply Voltage: +24V
- 50 Ohm Matched


Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Units
Frequency Range	18		40	GHz
Gain	30	35		dB
Gain Flatness		±2.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.5		dB
Input VSWR		1.8		:1
Output 1dB Compression Point (P1dB)	24	28		dBm
Saturated Output Power (Psat)		30		dBm
Isolation S12		-55		dB
Supply Current (Vcc=+24V)		700		mA

Weight	6.1Max. ounces	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	Copper
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Optional)

1W Wide Band Power Amplifier 18GHz~40GHz

Absolute Maximum Ratings

Operating Voltage	+26V
RF Input Power	+5dBm

Biassing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +24V biasing

Power OFF Procedure

Step 1	Turn off +24V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

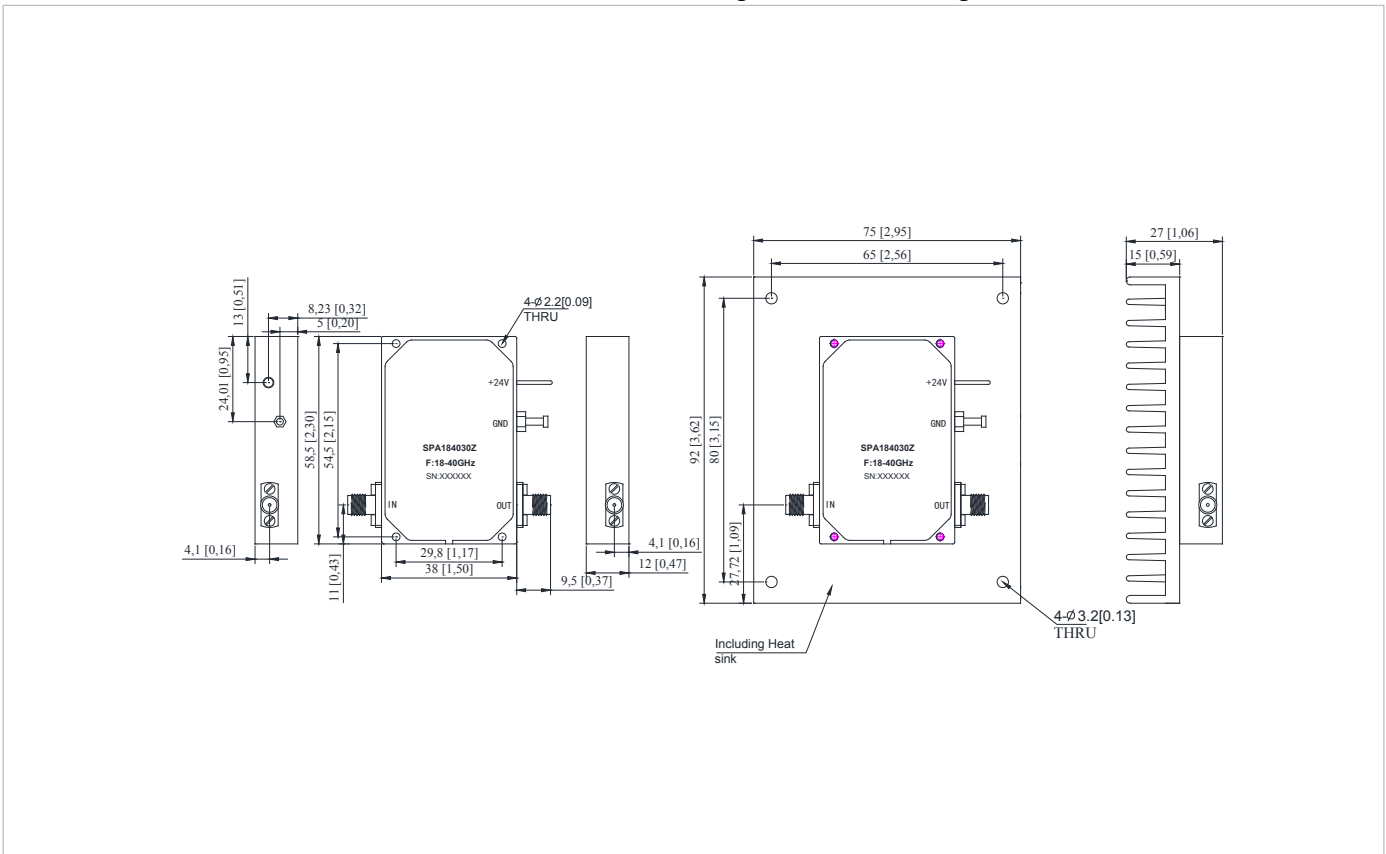
Environmental Specifications

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:

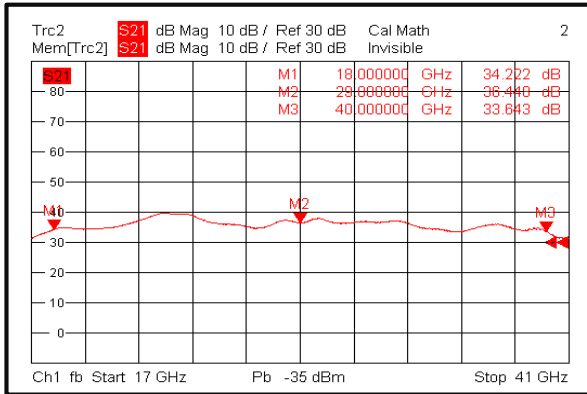
All Dimensions in mm (inches)
 Housing Tolerances ±0.1(0.004)
 (Excl Heat Sink).

Heat Sink required during operation(Sold Separately)
 Including outline drawing of heat sink with fan.

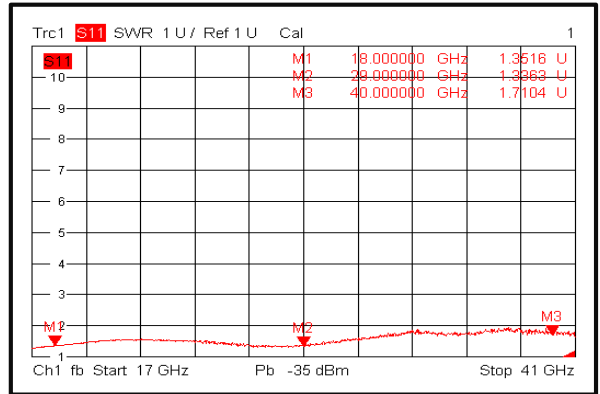


1W Wide Band Power Amplifier 18GHz~40GHz

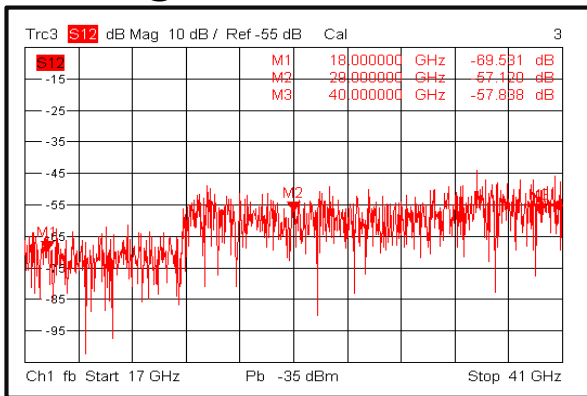
Gain@+25°C



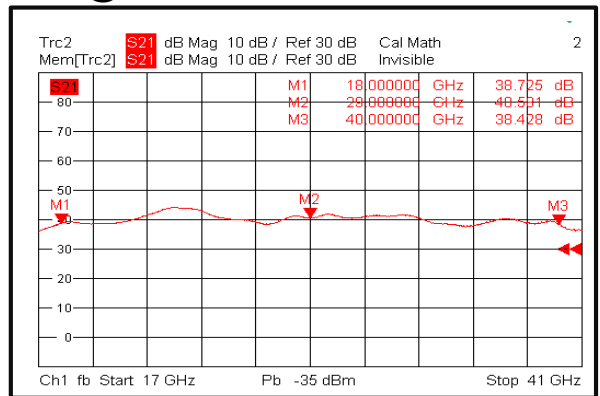
Input VSWR @+25°C



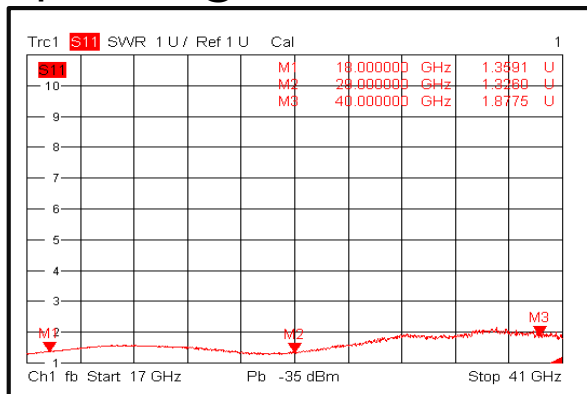
Isolation@+25°C



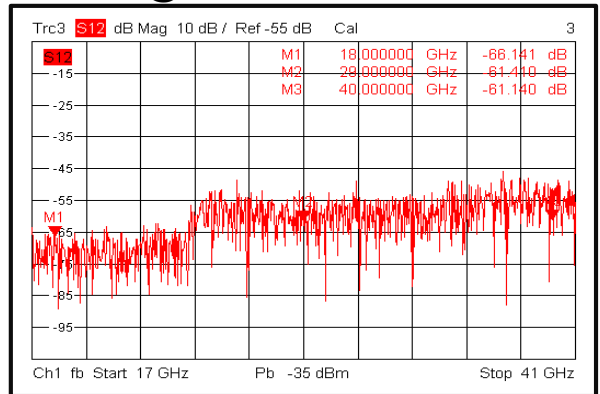
Gain@-40°C



Input VSWR @-40°C

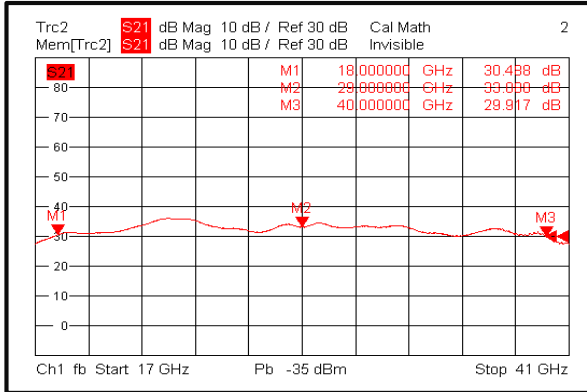


Isolation@-40°C

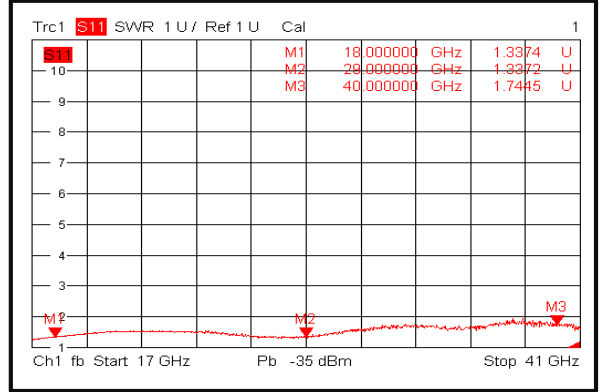


1W Wide Band Power Amplifier 18GHz~40GHz

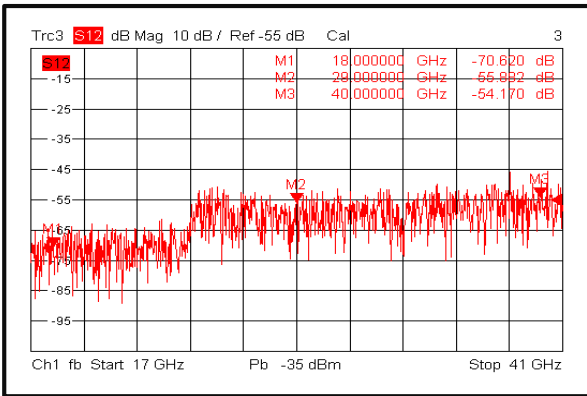
Gain@+85°C



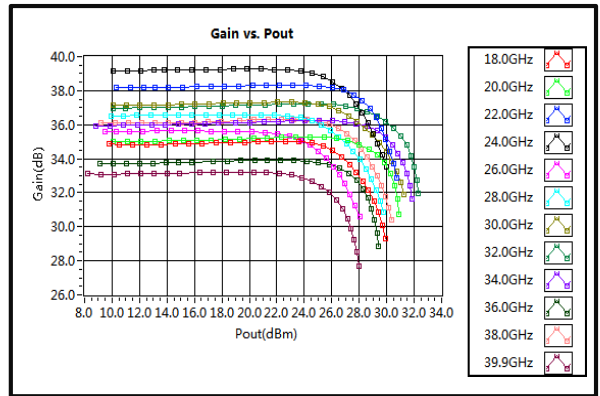
Input VSWR @+85°C



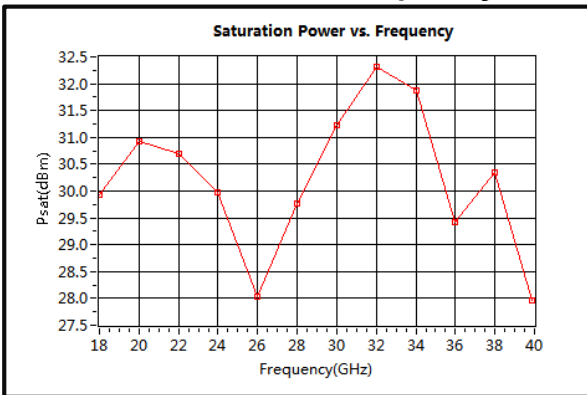
Isolation@+85°C



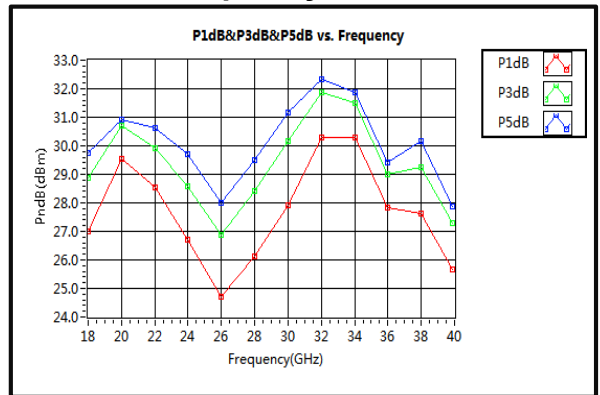
Gain vs. Output Power



Saturation Power vs. Frequency

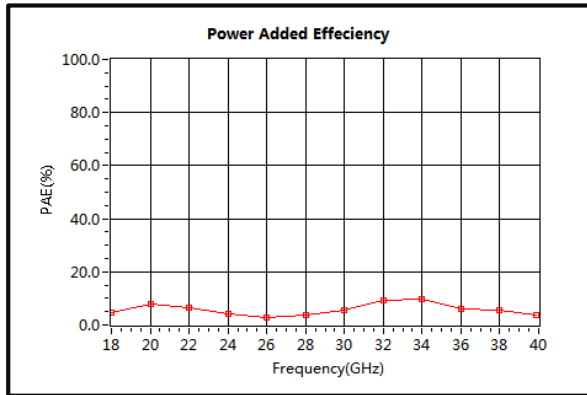


PndB vs. Frequency

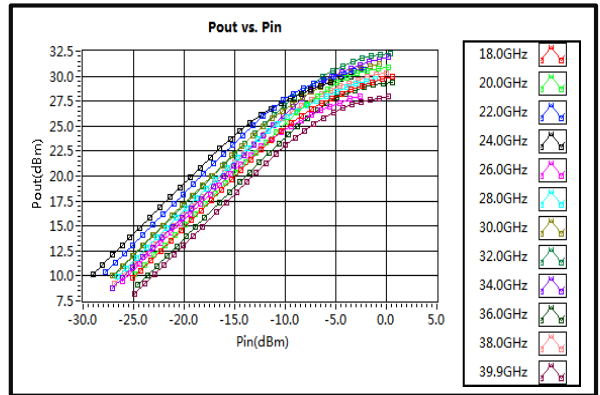


1W Wide Band Power Amplifier 18GHz~40GHz

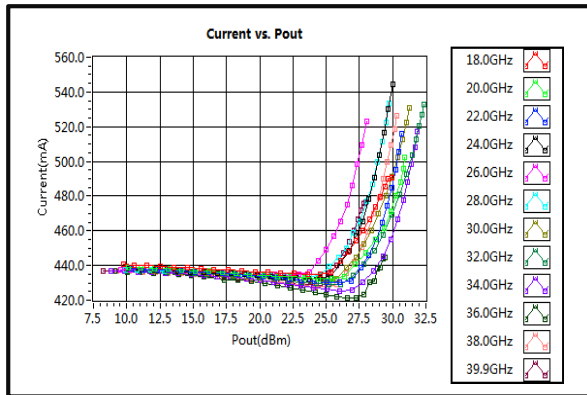
Power Added Efficiency



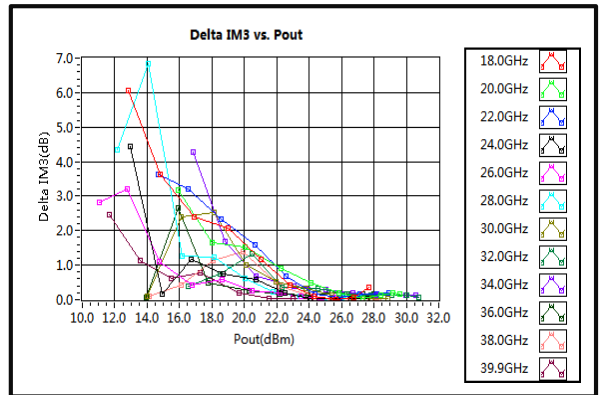
Pout vs. Pin



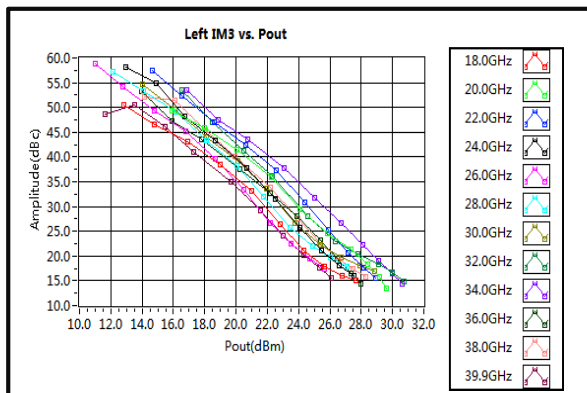
Current vs. Pout



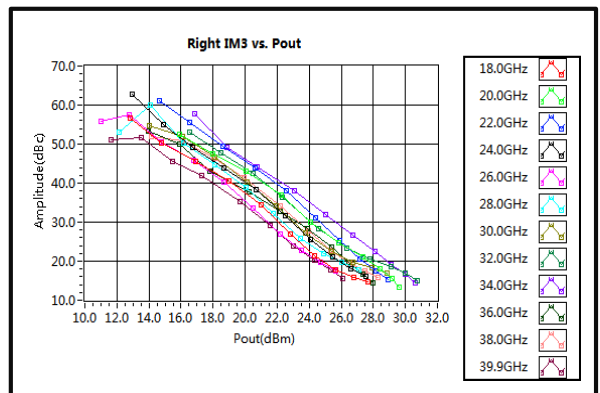
Delta IM3 vs. Pout



Left IM3 vs. Pout



Right IM3 vs. Pout



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