

Features

- Gain: 35dB Typical
- P1dB Output Power: 29dBm Typical
- Supply Voltage: +24V @ 700mA
- 50 Ohm Matched Input / Output
- Size: 4.02" x 1.85" x0.47 "



Typical Applications

- Wireless Infrastructure
 - Military & Aerospace
 - Fiber Optics
- RF Microwave & VSAT
Test Instrument

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	20		30	30		47	GHz
Gain	30	43		28	32		dB
Gain Flatness		±8.0			±3.0		dB
Gain Variation Over Temperature(-45 ~ +85)		±3.0			±3.0		dB
Input VSWR		1.6			1.8		:1
Output 1dB Compression Point (P1dB)	25	29		27	29		dBm
Saturated Output Power (Psat)		29			29		dBm
Supply Current (Idd) (Vcc=+24V)		700	1200		700	1200	mA
Power Added Efficiency		5			5		%
Isolation S12		-60			-55		dB

Weight	33.16 ounces	Impedance	50ohms
Input / Output Connectors	2.4mm-Female (2.92mm female optional)	Material	Copper
Finishing	Standard: Gold 40 micron; Nickel 220 micron thickness	Package Sealing	Epoxy Sealed (Standard)
	Option: Gold 80 micron; Nickel 180 micron thickness		Hermetically Sealed (Option with extra charge)

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Wide Band Power Amplifier 20GHz~47GHz

Absolute Maximum Ratings

Operating Voltage	+28V
RF Input Power (RFIN)	0dBm

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

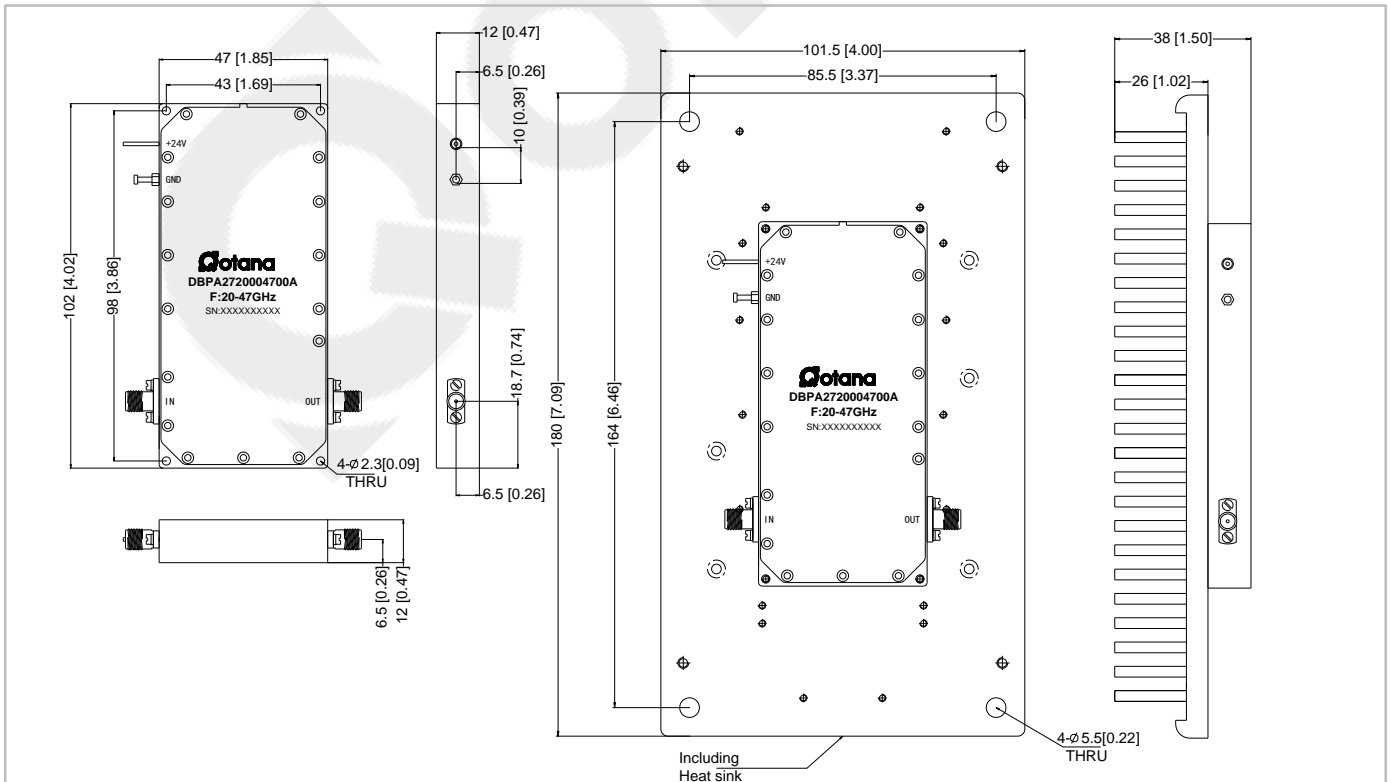
Environmental Specifications

Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°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 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Outline Drawing:

All Dimensions in mm (inches)

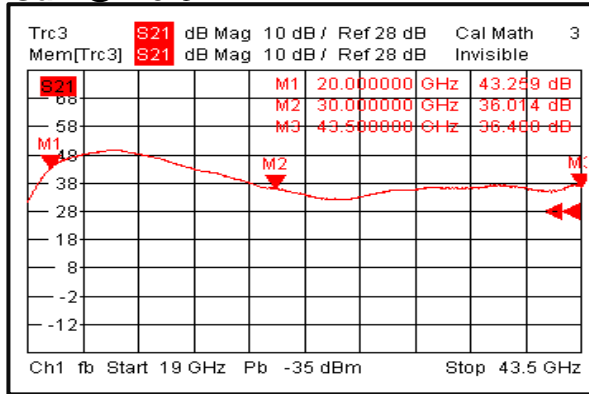
Heat Sink required during operation(Sold Separately)



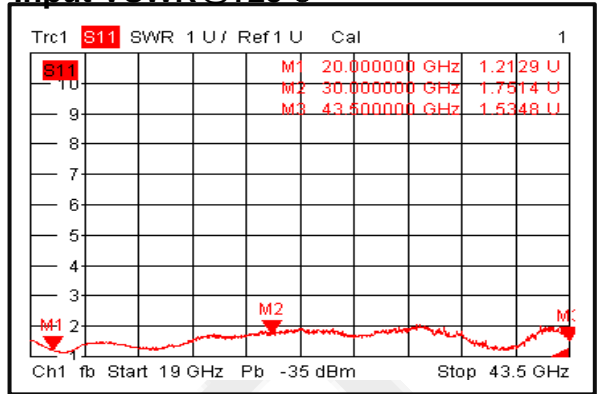
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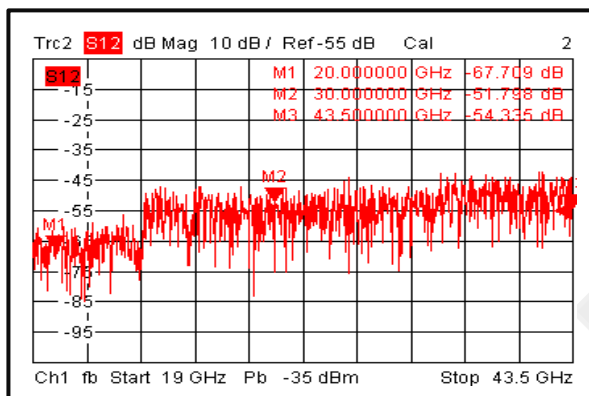
Gain@+25°C



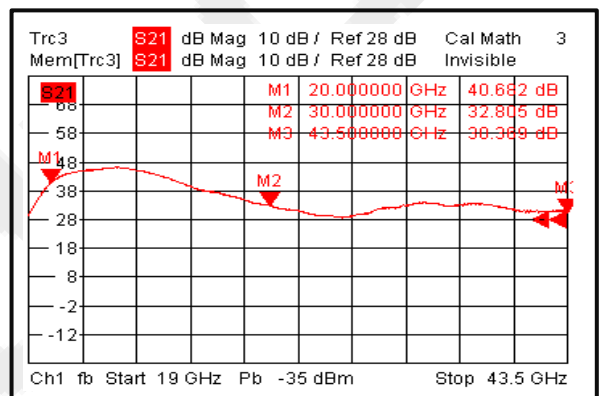
Input VSWR@+25°C



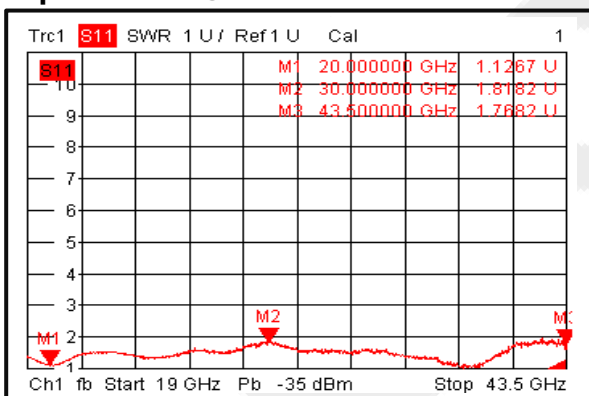
Isolation@+25°C



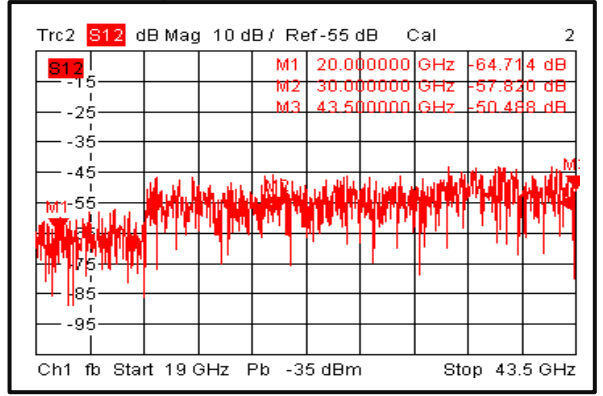
Gain@+85°C



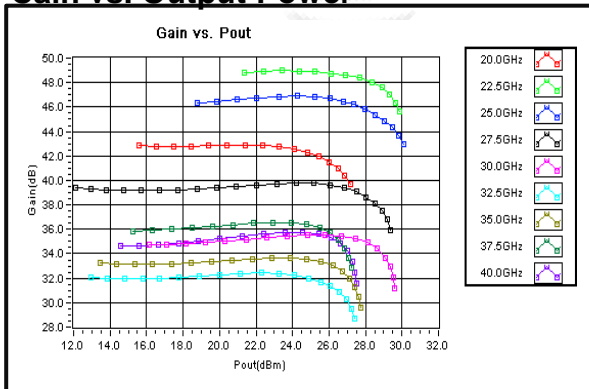
Input VSWR@+85°C



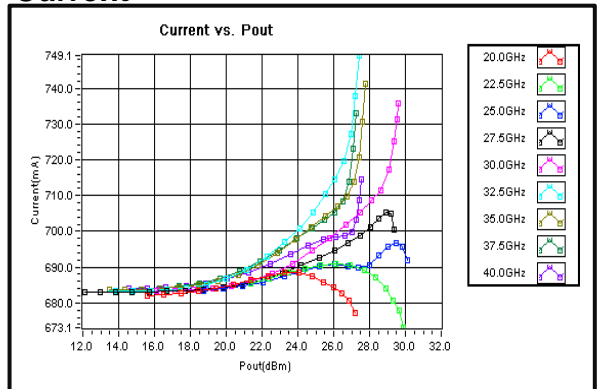
Isolation@+85°C



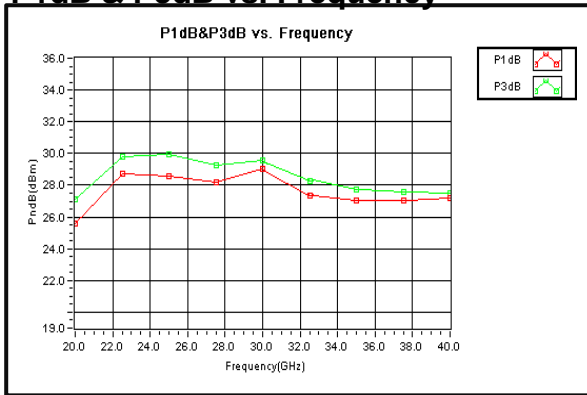
Gain vs. Output Power



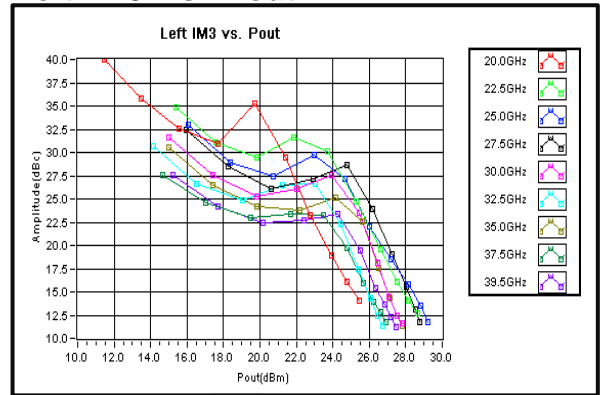
Current



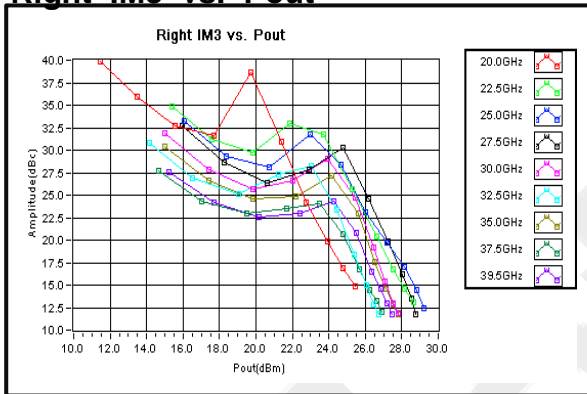
P1dB & P3dB vs. Frequency



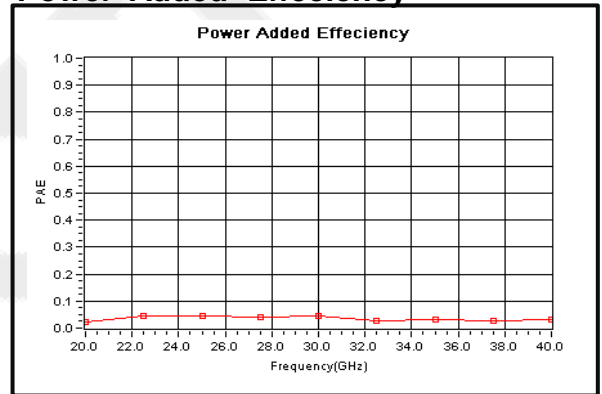
Left IM3 vs. Pout



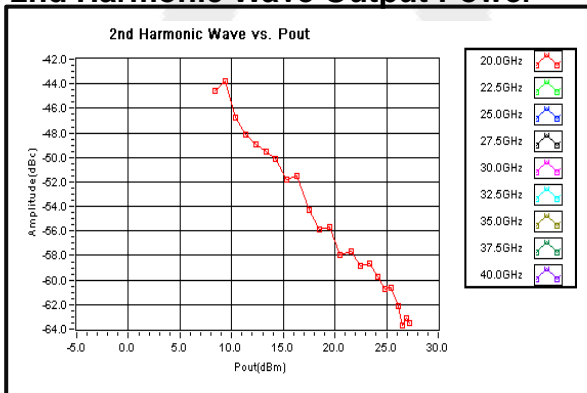
Right IM3 vs. Pout



Power Added Efficiency



2nd Harmonic Wave Output Power



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