

Features

- Gain: 40dB typical
- Output power +37dBm typical
- Supply Voltage: +28V @ 650m A
- 50 Ohm Matched



Typical Applications

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

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.7		0.9	1		6	GHz
Gain	38	40		37	40		dB
Gain Flatness		±1.5			±1.5		dB
Gain Variation Over Temperature (-45 ~ +85)		±1.0			±1.0		dB
Input Return Loss		13			13		dB
Output 1dB Compression Point (P1dB)	35	37		35	37		dBm
Saturated Output Power (Psat)		39			39		dBm
Isolation S12		-55			-55		dB
Supply Current (Vcc=+28V)		650	1500		650	1500	mA
Efficiency at P1dB		20			20		%
Input Max Power (No damage)		+8			+8		dBm

Weight	6.35 ounces	Impedance	50ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finishing	Standard: Gold 40 micron; Nickel 220 micron thickness	Package Sealing	Epoxy Sealing (Standard)
	Option: Gold 80 micron; Nickel 180 micron thickness		Hermetically Sealed (Option with extra charge)

Absolute Maximum Ratings

Operating Voltage	+28V ± 5%
RF Input Power (RFIN)	+8 dBm

Biassing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +28V biasing

Power OFF Procedure

Step 1	Turn off +28V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

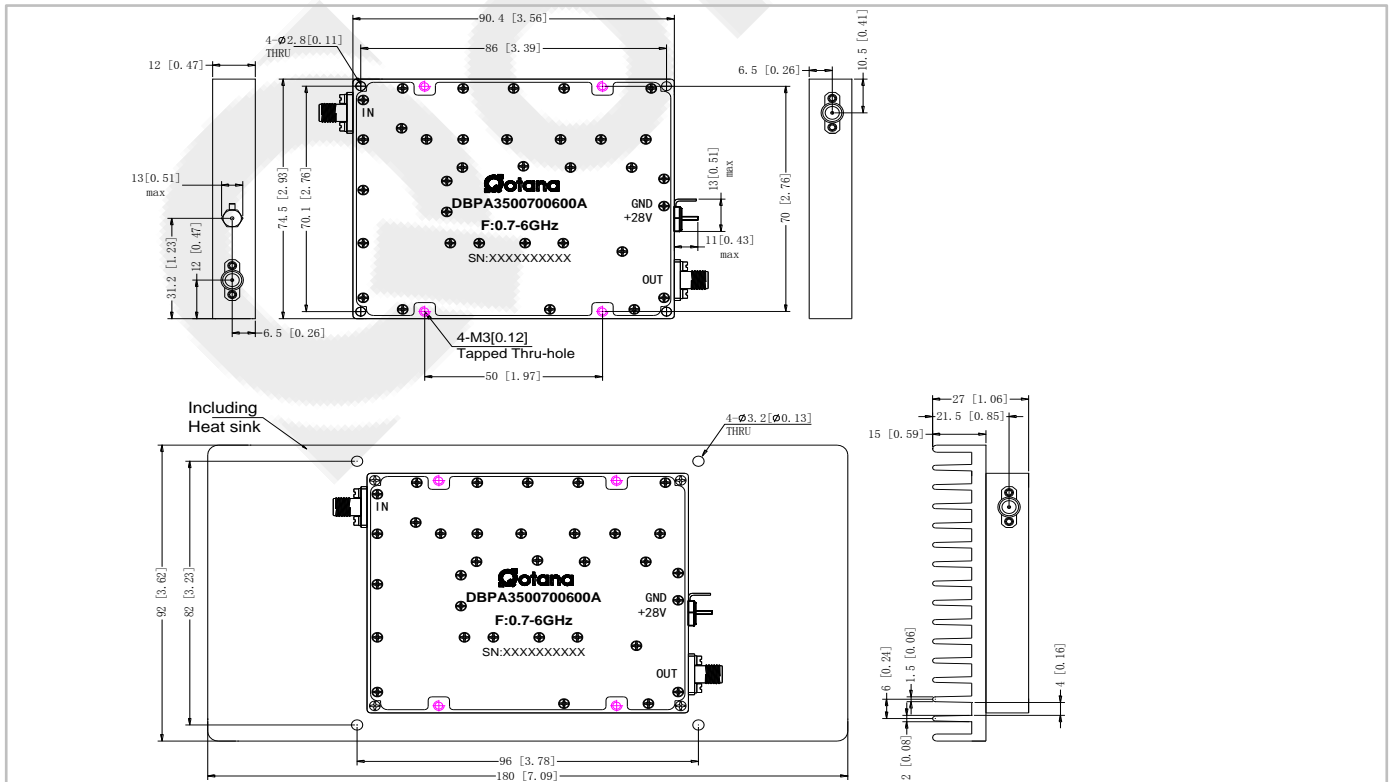
Environmental Specifications

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

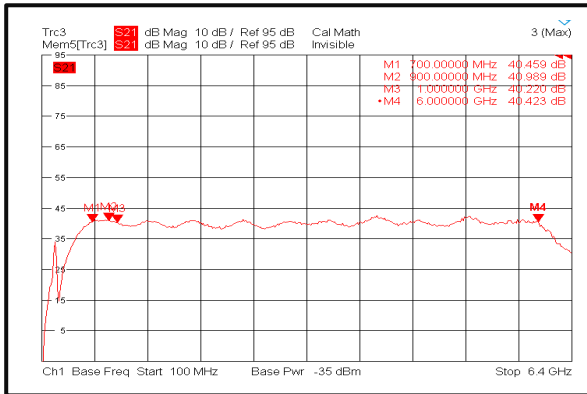
Outline Drawing:

All Dimensions in mm (inches)

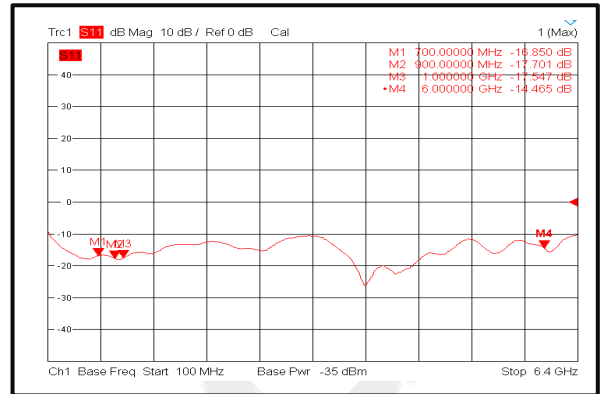
Heat Sink required during operation(Sold Separately)



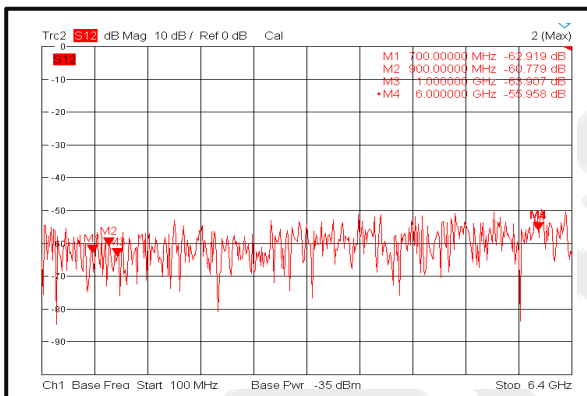
Gain@+25°C



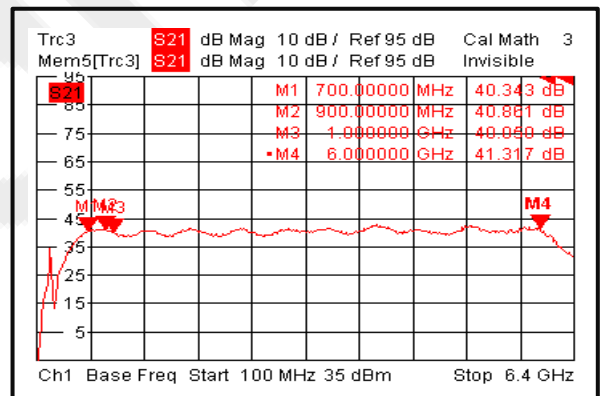
Input Return Loss@+25°C



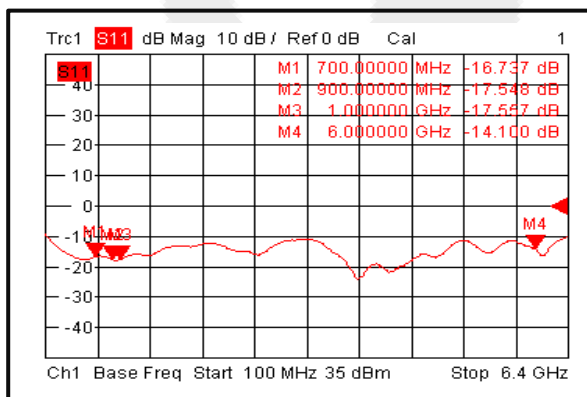
Isolation@+25°C



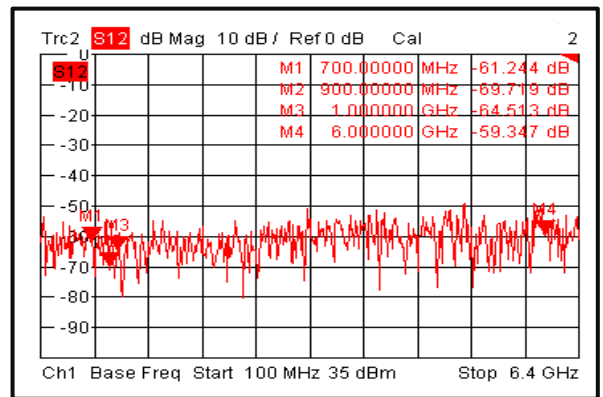
Gain@-45°C



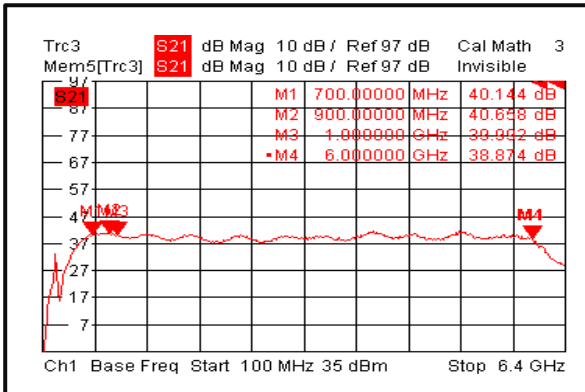
Input Return Loss@-45°C



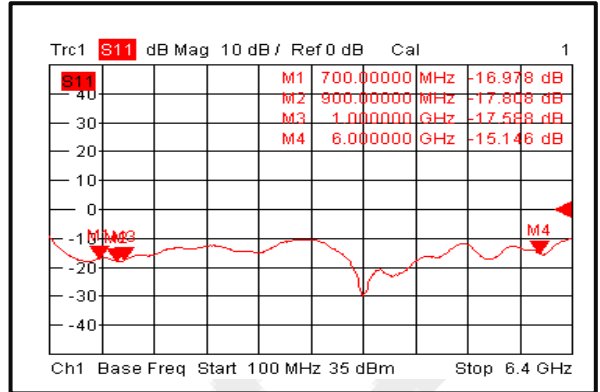
Isolation@-45°C



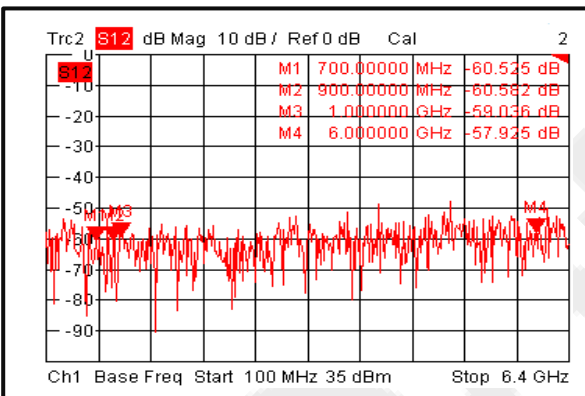
Gain@+85°C



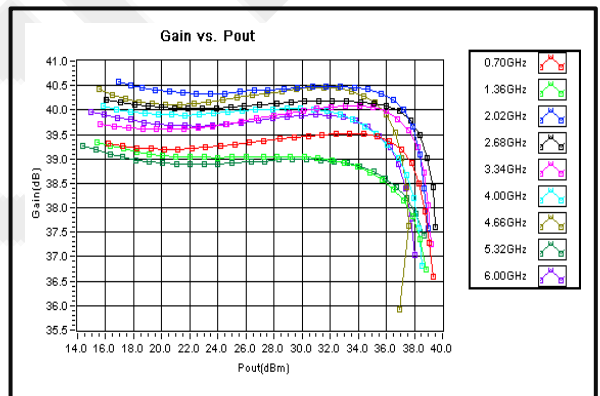
Input Return Loss@+85°C



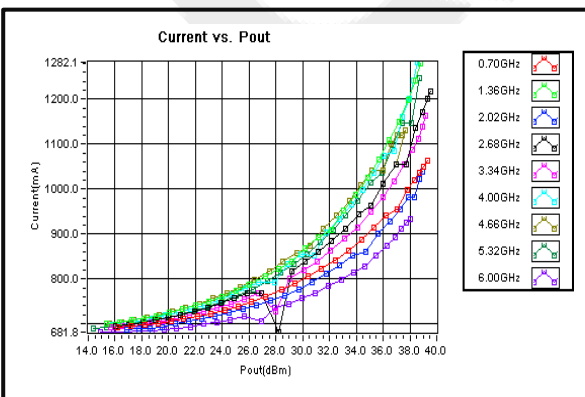
Isolation@+85°C



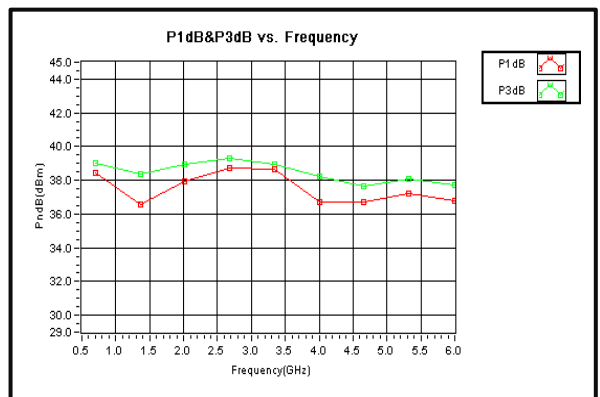
Gain vs. output power



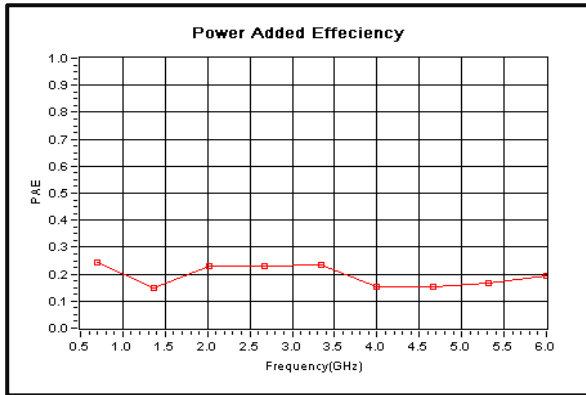
Current



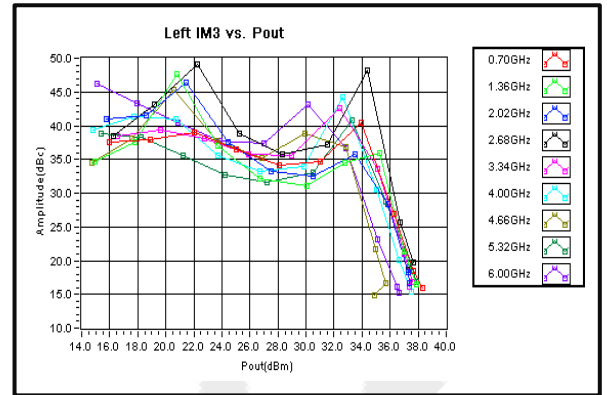
P1dB & P3dB vs. Frequency



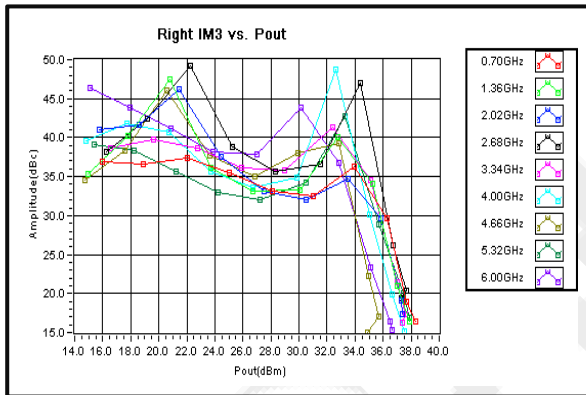
Power Added Efficiency



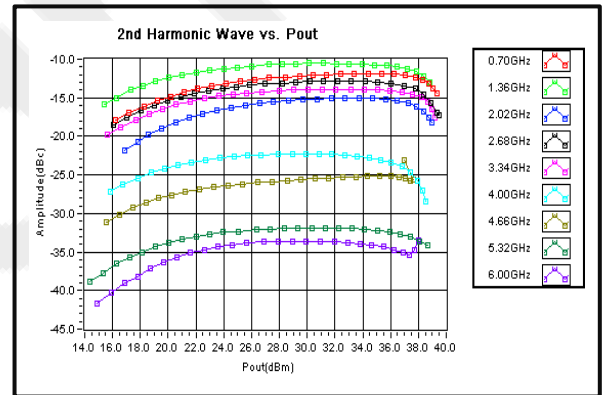
Left IM3 vs. Pout



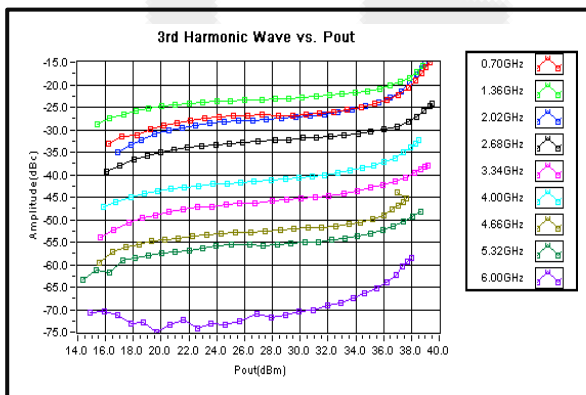
Right IM3 vs. Pout



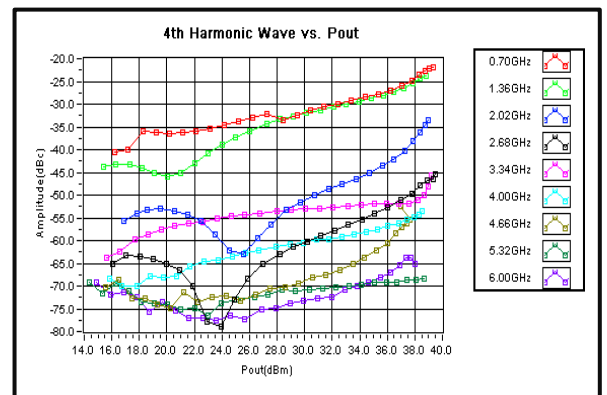
2nd Harmonic Wave output Power



3rd Harmonic Wave output Power



4th Harmonic Wave output Power



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