

2 GHz to 6 GHz, Medium Power Broadband Amplifier with 2 Watt, 32 dB Gain and SMA

SPA-060-30-02-SMA is a 2W coaxial wideband power amplifier operating in the 2 to 6 GHz frequency range. The amplifier offers 33 dBm min of P1dB and 30 dB min small signal gain with the excellent gain flatness of ± 1.0 dB max and the output IP3 performance of 39 dBm. This performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. The amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The amplifier operates over the temperature range of -55°C and +85°C.

Electrical Specifications (TA = +25°C, DC Voltage = 15Volts, DC Current = 1,700mA)

Description	Min	Typ	Max	Unit
Frequency Range	2		6	GHz
Gain	31	32		dB
Small Signal Gain at OTR*	30			dB
Gain Flatness			± 1	dB
P1dB	+33			dBm
IP3		+42		dBm
Reverse Isolation		50		dB
Noise Figure		5	5.5	dB
Noise Figure at OTR*			6	dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11		15	Volts
Operating DC Current		1,700		mA
Operating Temperature Range (OTR)	-55		+85	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-55 to +85	°C
Storage Temperature	-65 to +95	°C



ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Configuration

- Connector 1
- Connector 2

SMA Female
SMA Female

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant

Yes



Features:

- 2 GHz to 6 GHz Frequency Range
- P1dB: 33 dBm min
- Small Signal Gain: 32 dB Typical
- Gain Flatness: ± 1.0 dB max
- High output IP3: 42 dBm
- Noise Figure: 5 dB
- Reverse Isolation: 50 dB
- 50 Ohms Input and Output Matched
- -55 to +85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications:

- Electronic Warfare
- Electronic Countermeasures
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications/ Microwave Radio Systems
- Driver Amplifier
- High Power Output Amplifier

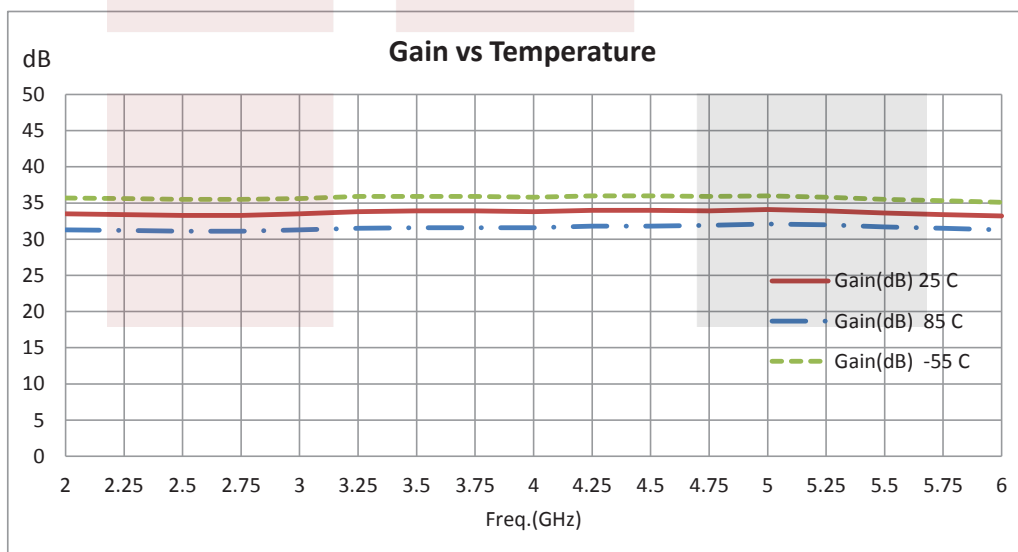
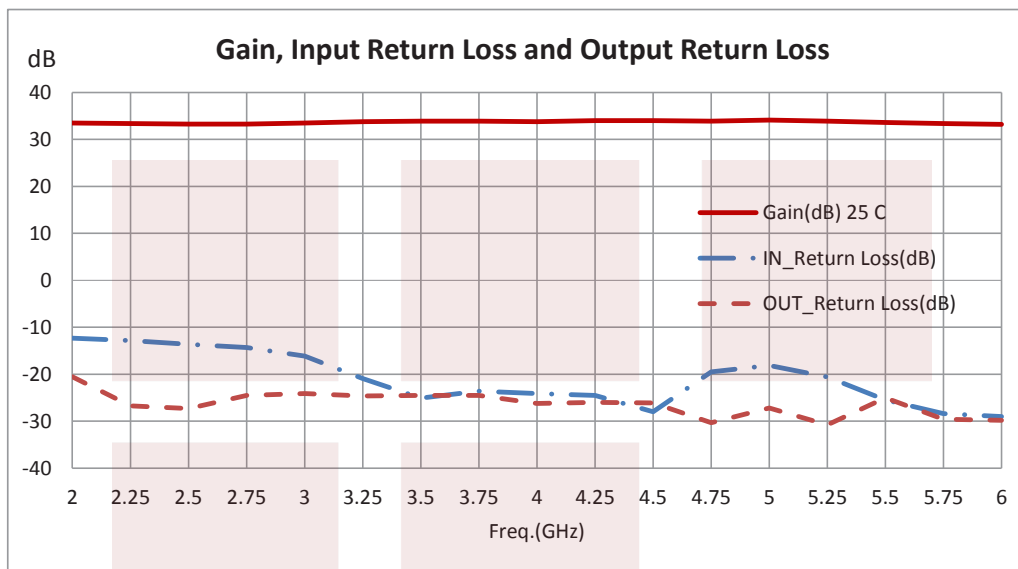
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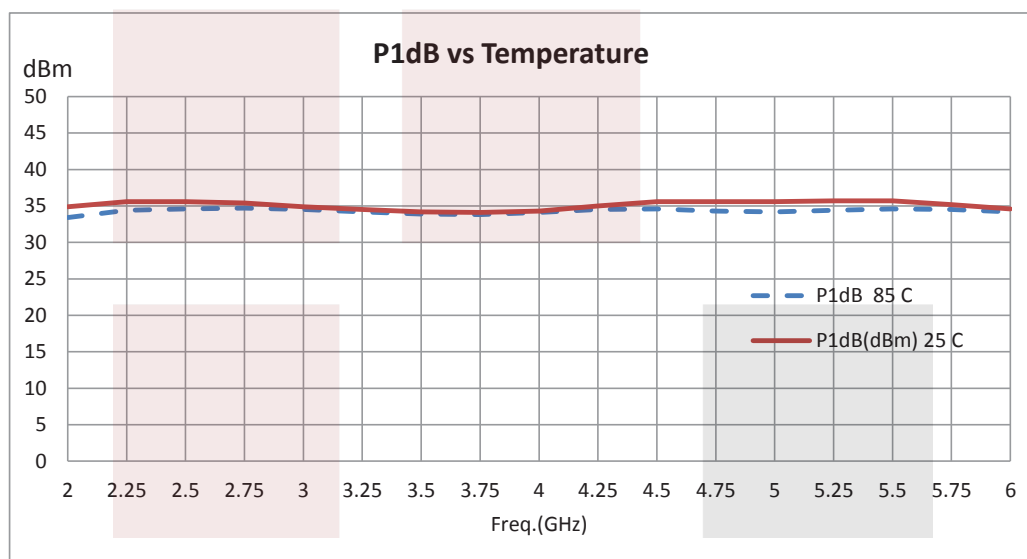
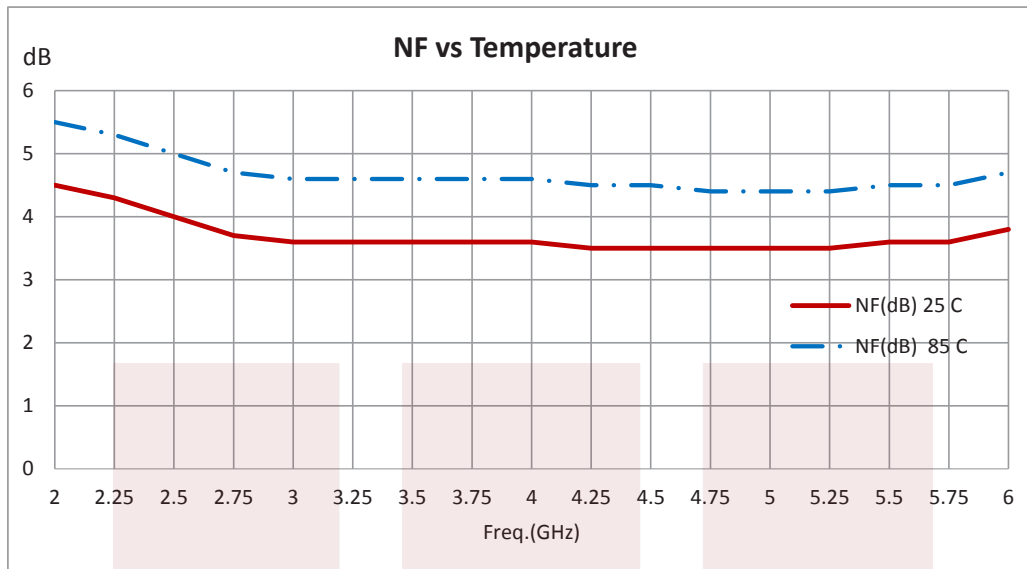
Plotted and Other Data

Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

Power Data





2 GHz to 6 GHz, Medium Power Broadband Amplifier with 2 Watt, 32 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2 GHz to 6 GHz, Medium Power Broadband Amplifier with 2 Watt, 32 dB Gain and SMA SPA-060-30-02-SMA](http://www.fairviewmicrowave.com/2-6-ghz-medium-power-broadband-amplifier-spa-060-30-02-sma-p.aspx)

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