

Medium Power Amplifier at 600 mW Operating From 50 MHz to 1,000 MHz with 26 dB Gain and SMA

SPA-010-26-005-SMA is a 0.6W wideband coaxial power amplifier operating in the 50 to 1000 MHz frequency range. The amplifier offers 28 dBm of P1dB and 26 dB (min) small signal gain with the excellent gain flatness of ± 0.75 dB. 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 -30°C and +70°C.

Electrical Specifications (TA = +25°C , DC Voltage = 12Volts , DC Current = 400mA)

Description	Min	Typ	Max	Unit
Frequency Range	50		1,000	MHz
Small Signal Gain		26		dB
Gain Flatness			± 0.75	dB
P1dB	+27	+28		dBm
Output 3rd Intercept Point	+36			dBm
Noise Figure		5		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	15	Volts
Operating DC Current		400		mA
Operating Temperature Range	-30		+70	°C

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+16	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-30 to +70	°C
Storage Temperature	-55 to +85	°C



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

Configuration

- Connector 1 SMA Female
- Connector 2 SMA Female

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

RoHS Compliant Yes



Features:

- 50 MHz to 1,000 MHz Frequency Range
- P1dB: 28 dBm Typical
- Small Signal Gain: 26 dB Typical
- Gain Flatness: ± 0.75 dB max
- Noise Figure: 5 dB
- 50 Ohm Input and Output Matched
- -30 to +70°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications:

- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- RF/Microwave Radio Systems
- Driver Amplifier
- High Power Output Amplifier

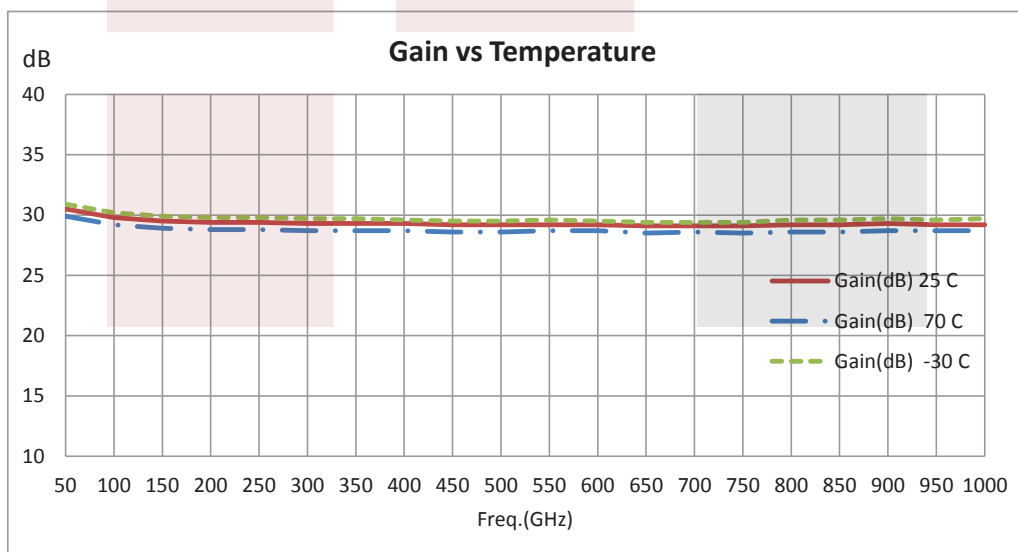
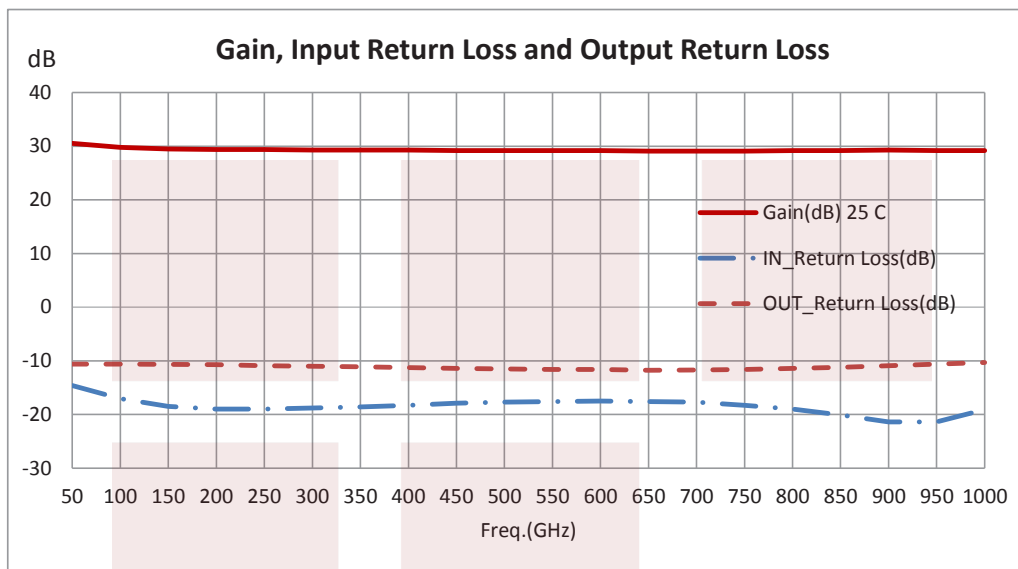
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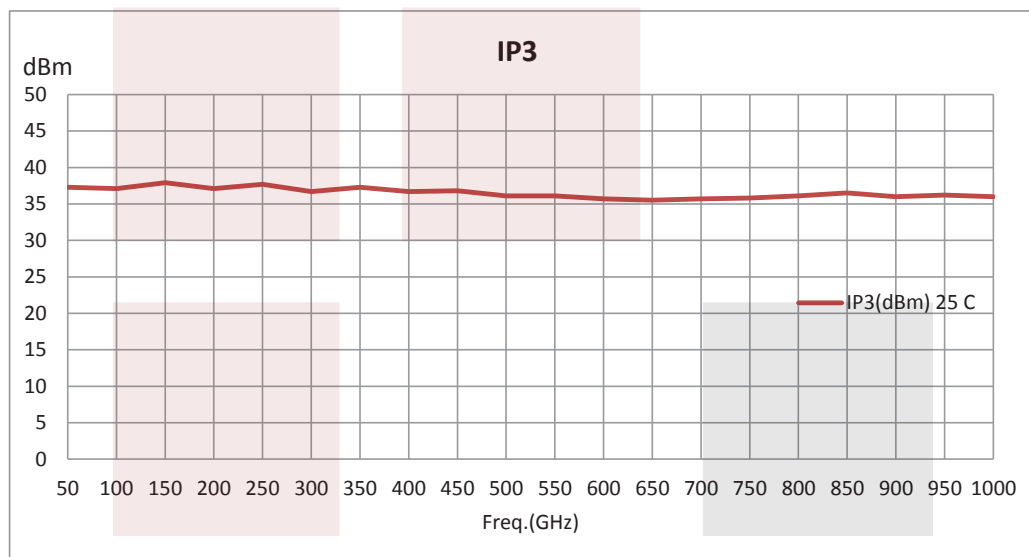
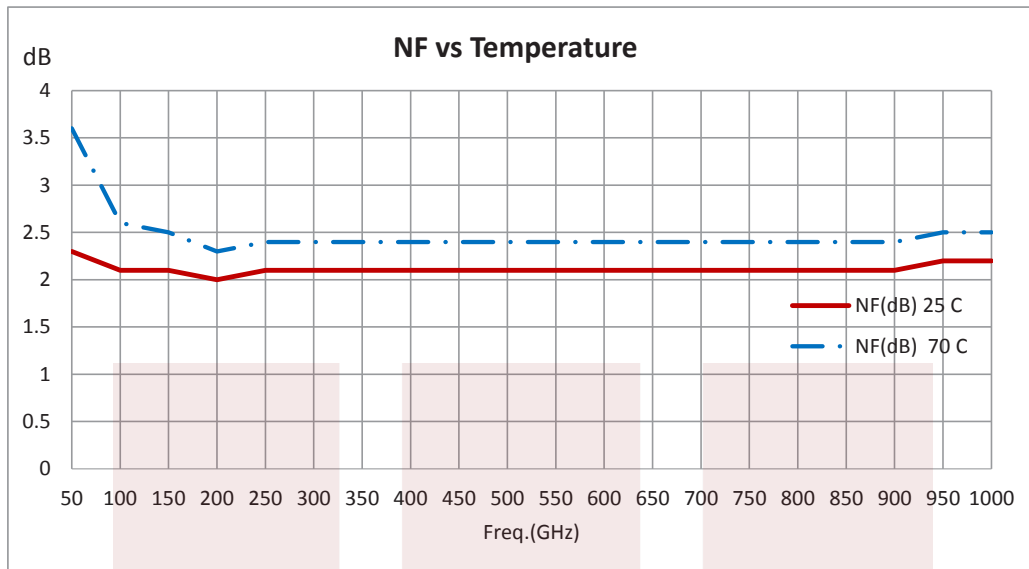
Plotted and Other Data

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



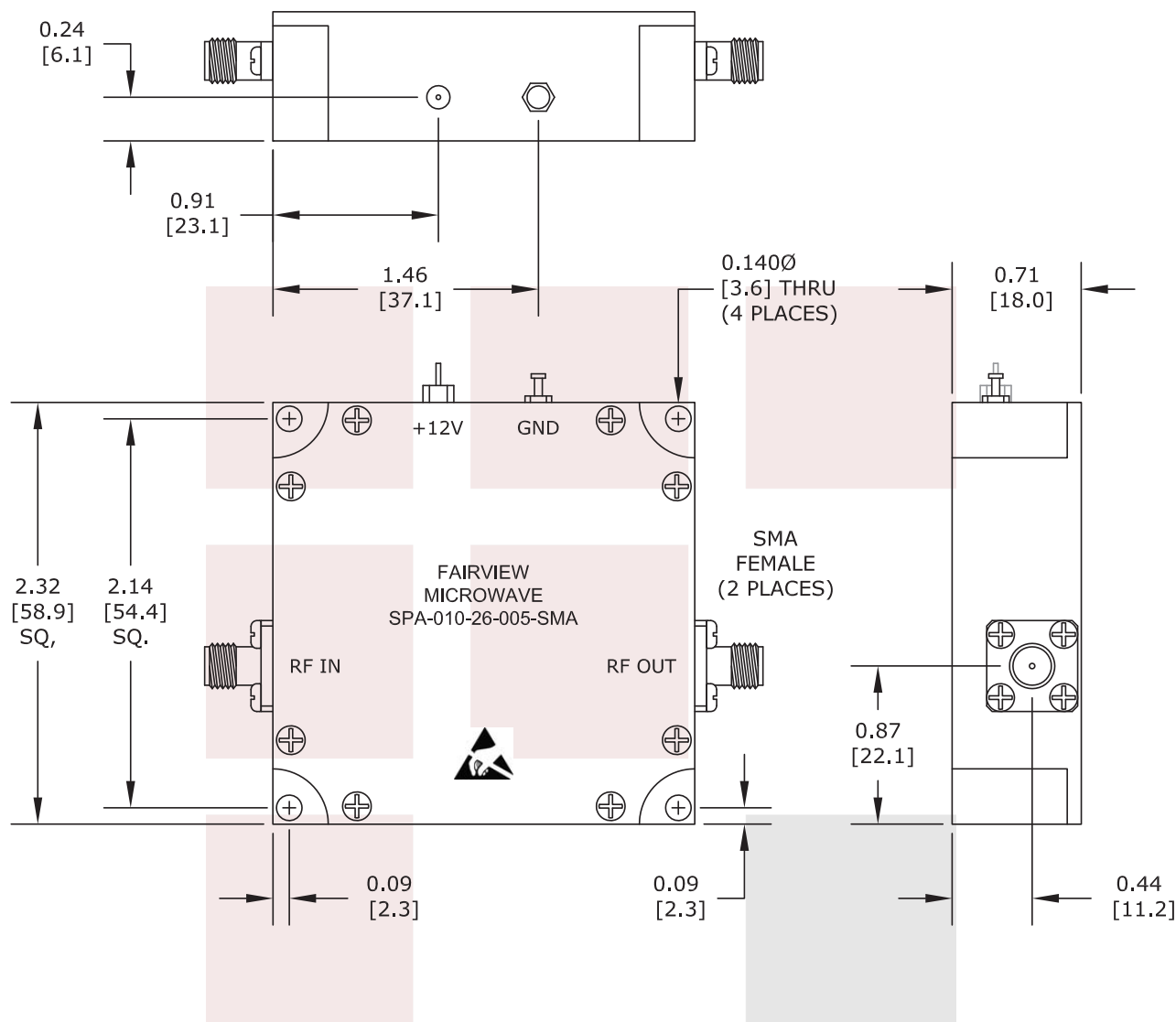


Medium Power Amplifier at 600 mW Operating From 50 MHz to 1,000 MHz with 26 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Medium Power Amplifier at 600 mW Operating From 50 MHz to 1,000 MHz with 26 dB Gain and SMA SPA-010-26-005-SMA](http://www.fairviewmicrowave.com/medium-power-amplifier-600mw-26db-spa-010-26-005-sma-p.aspx)

URL: <http://www.fairviewmicrowave.com/medium-power-amplifier-600mw-26db-spa-010-26-005-sma-p.aspx>

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NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

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TITLE Medium Power Amplifier at 600 mW Operating From 50 MHz to 1,000 MHz with 26 dB Gain and SMA		DWG NO SPA-010-26-005-SMA		CAGE CODE 3FKR5	
CAD FILE	050914	SHEET		SCALE	N/A
		SIZE	A		2233