

500 MHz to 2 GHz, Medium Power Broadband Amplifier with 24 dBm, 46 dB Gain and SMA

SPA-020-42-003-SMA is a 24 dBm power amplifier designed for operation in the 0.5 GHz to 2 GHz frequency range. The amplifier provides an IP3 of 34 dBm Typ and 42 dB of Gain Min over the operating frequency range. The amplifier requires only +12 VDC power supply.

Electrical Specifications (TA= 25°C, VDC1 = 12 Vdc)

Description	Min	Typ	Max	Unit
Frequency Range	0.5		2	GHz
Gain	42	46		dB
Gain Flatness		±0.8		dB
P1dB	+24			dBm
IP3		+34		dBm
Noise Figure		2.7		dB
Input VSWR		2:1	2.7:1	
Output VSWR		2:1	2.7:1	
Operating DC Voltage 1	11	12	15	Volts
Operating DC Current		300		mA
Operating Temperature Range (OTR)	-30		+70	°C

Mechanical Specifications

Size	
Length	1.35 in [34.29 mm]
Width	0.9 in [22.86 mm]
Height	0.5 in [12.7 mm]
Weight	0.0945 lbs [42.86 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-30 to +70 deg C
Shock	RTCA, DO-160C
Vibration	RTCA, DO-160C
Temperature Cycling	MIL-STD-883, METHOD 1010

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

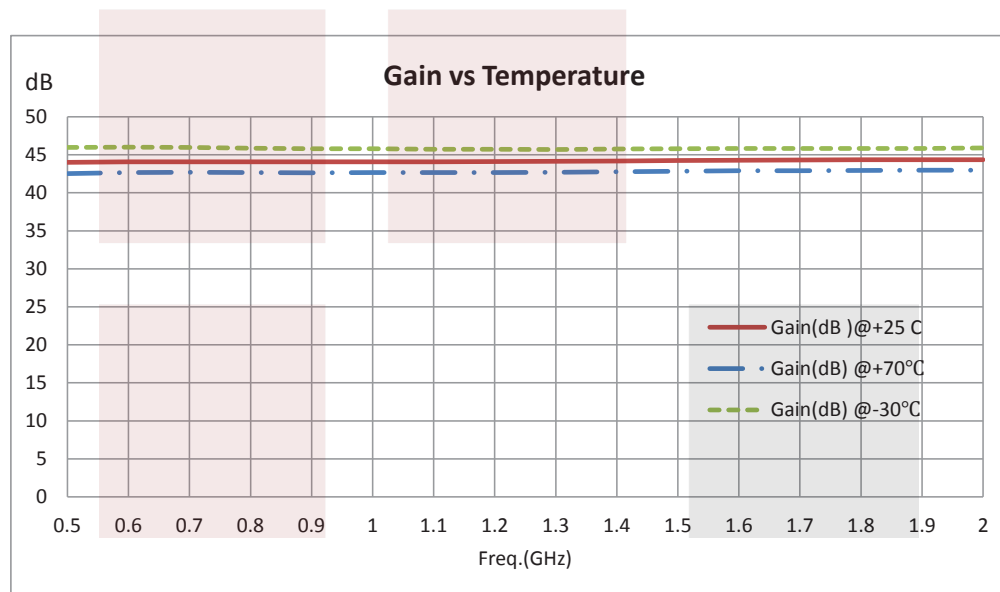
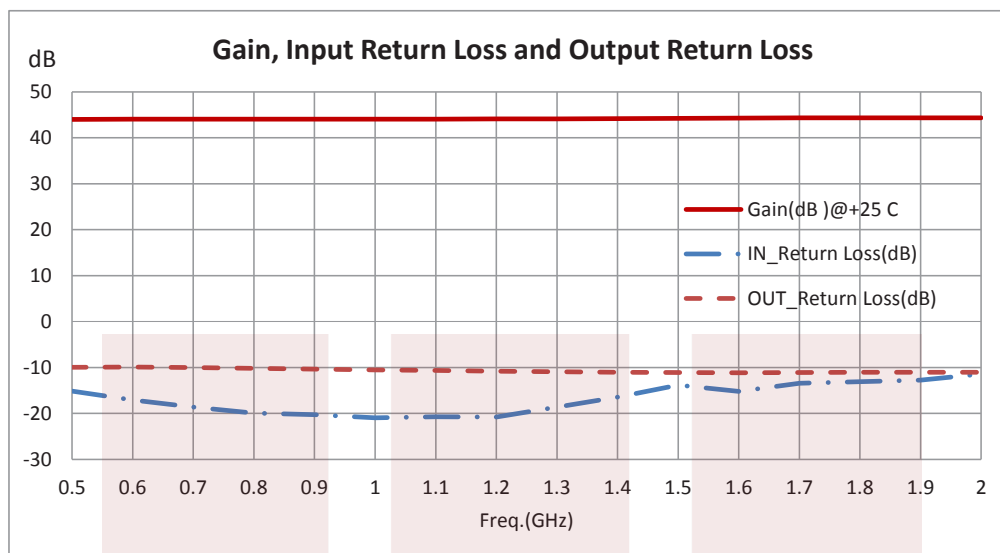
- 0.5 GHz to 2.0 GHz Frequency Range
- P1dB 24 dBm min.
- IP3 34 dBm typ.
- Gain 42 dB min.
- Gain Flatness +/-0.8 dB

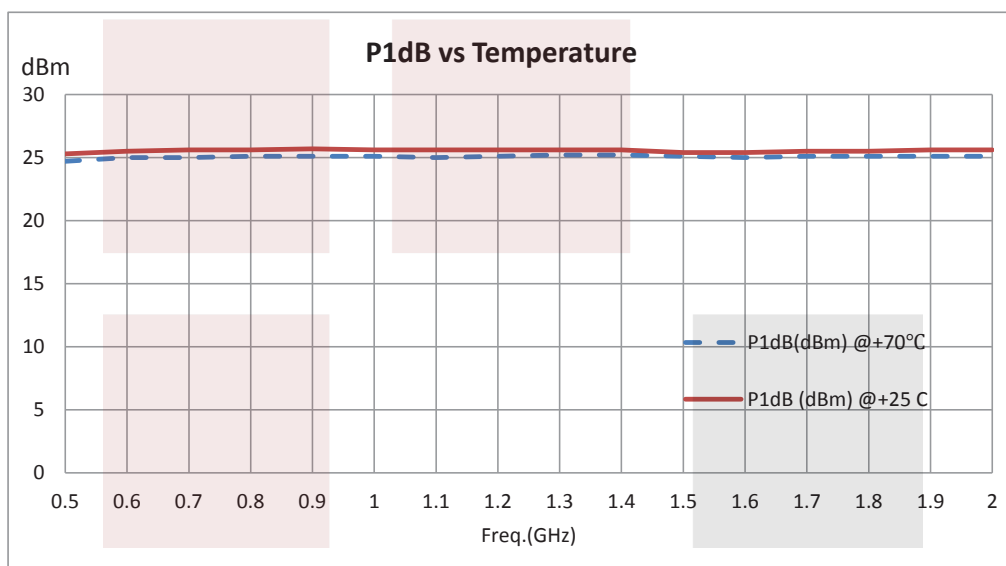
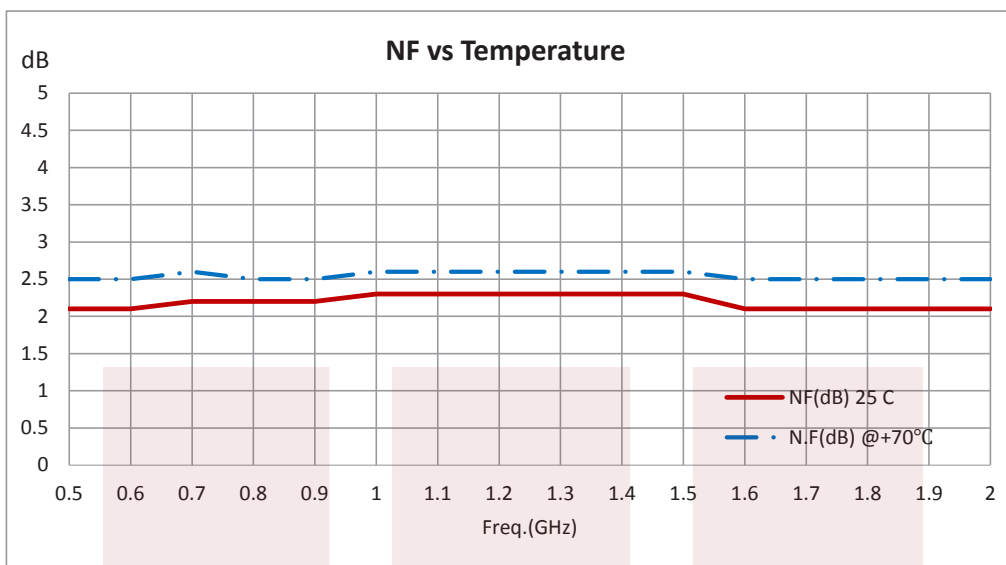
Applications:

- Medium Power Amplifier
- Driver Amp
- Military Communications
- Radar Driver Stage
- Test & Measurement

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Typical Performance Data



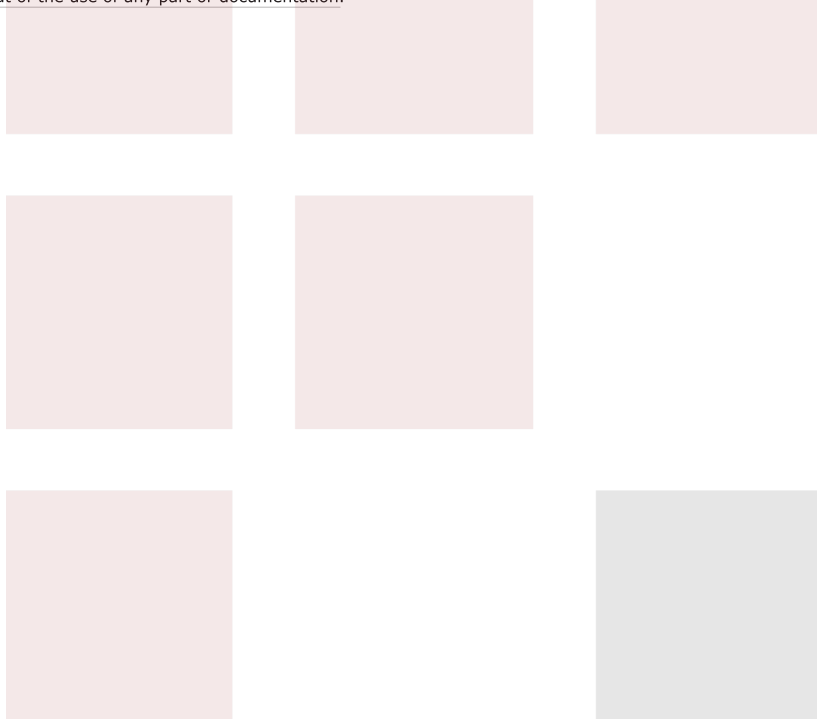


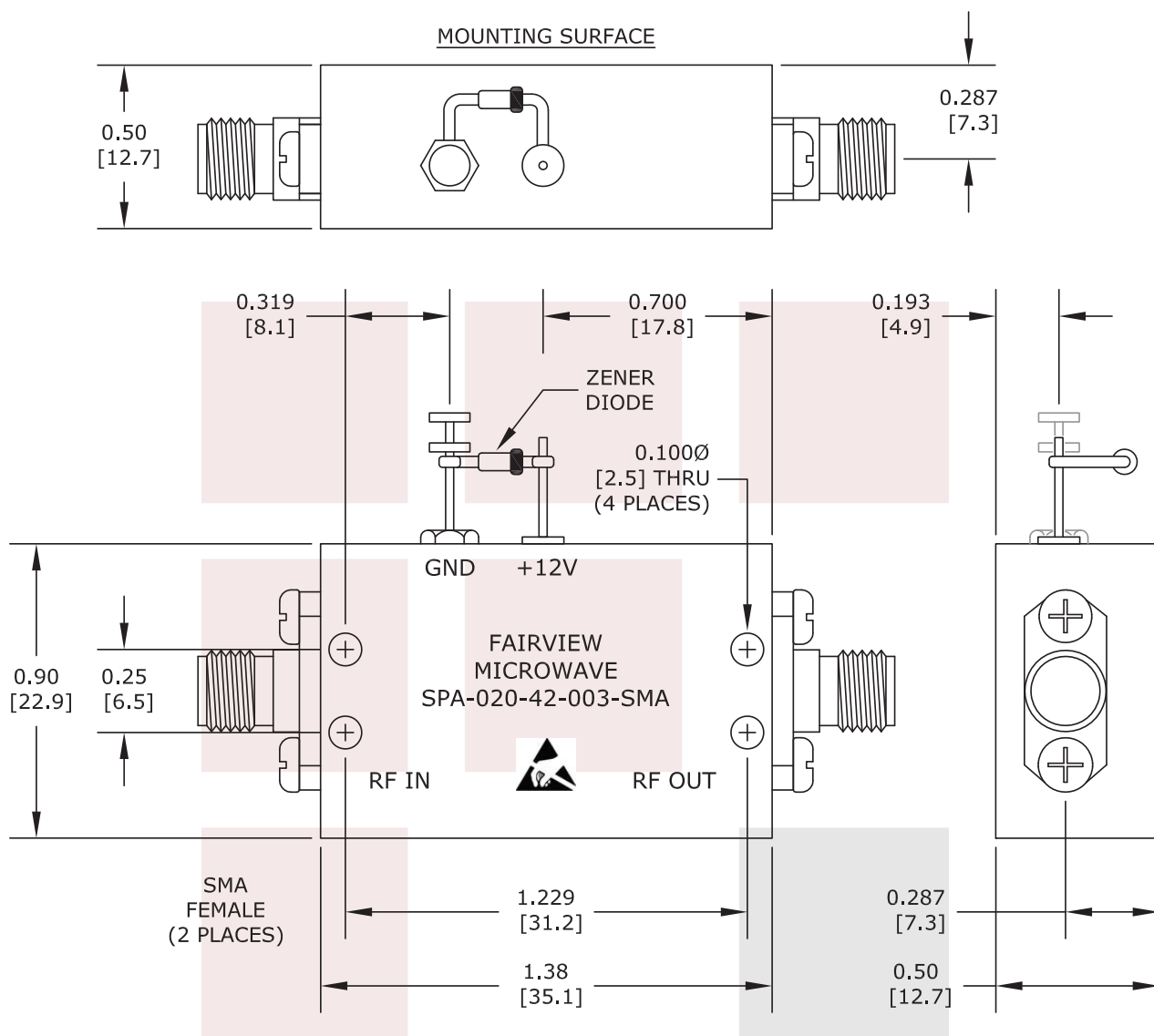
500 MHz to 2 GHz, Medium Power Broadband Amplifier with 24 dBm, 46 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [500 MHz to 2 GHz, Medium Power Broadband Amplifier with 24 dBm, 46 dB Gain and SMA SPA-020-42-003-SMA](https://www.fairviewmicrowave.com/500-mhz-2-ghz-medium-power-broadband-amplifier-spa-020-42-003-sma-p.aspx)

URL: <https://www.fairviewmicrowave.com/500-mhz-2-ghz-medium-power-broadband-amplifier-spa-020-42-003-sma-p.aspx>

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TITLE 500 MHz to 2 GHz, Medium Power Broadband Amplifier with 24 dBm, 46 dB Gain and SMA		DWG NO SPA-020-42-003-SMA		CAGE CODE 3FKR5	
CAD FILE	103014	SHEET	SCALE	N/A	SIZE A 2233