

6 GHz to 18 GHz, Medium Power Broadband Amplifier with 1 Watt, 30 dB Gain and SMA

SPA-180-30-01-SMA-B is a 30 dBm power amplifier designed for operation in the 6 GHz to 18 GHz frequency range. The amplifier provides 30 dB of Gain Min over the operating frequency range. High efficiency operation is achieved by using hybrid MIC designs and advanced GaAs PHEMT devices. The amplifier requires only +16 VDC power supply.

Electrical Specifications (TA= 25°C)

Description	Min	Typ	Max	Unit
Frequency Range	6		18	GHz
Gain	30			dB
Gain Flatness		±1.5		dB
P1dB	+30			dBm
Input VSWR		1.8:1	2:1	
Output VSWR		1.8:1	2:1	
Operating DC Voltage 1	16		18	Volts
Operating DC Current		1,700		mA
Quiescent Current		2,500		mA
Operating Temperature Range (OTR)	-40		+70	°C

Mechanical Specifications

Size	
Length	2.65 in [67.31 mm]
Width	2.5 in [63.5 mm]
Height	0.45 in [11.43 mm]
Weight	0.2925 lbs [132.68 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 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:
- 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.



Features:

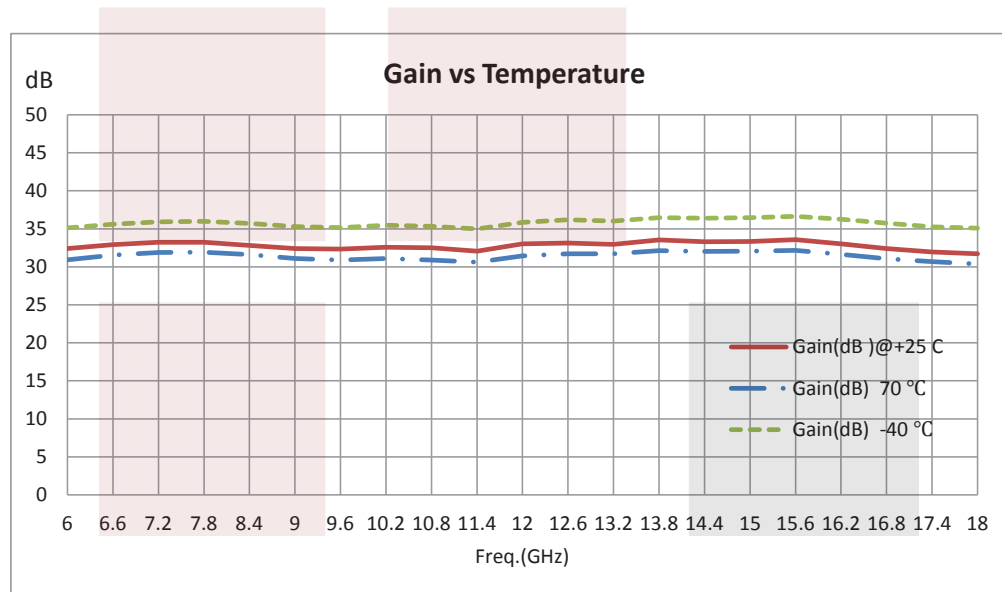
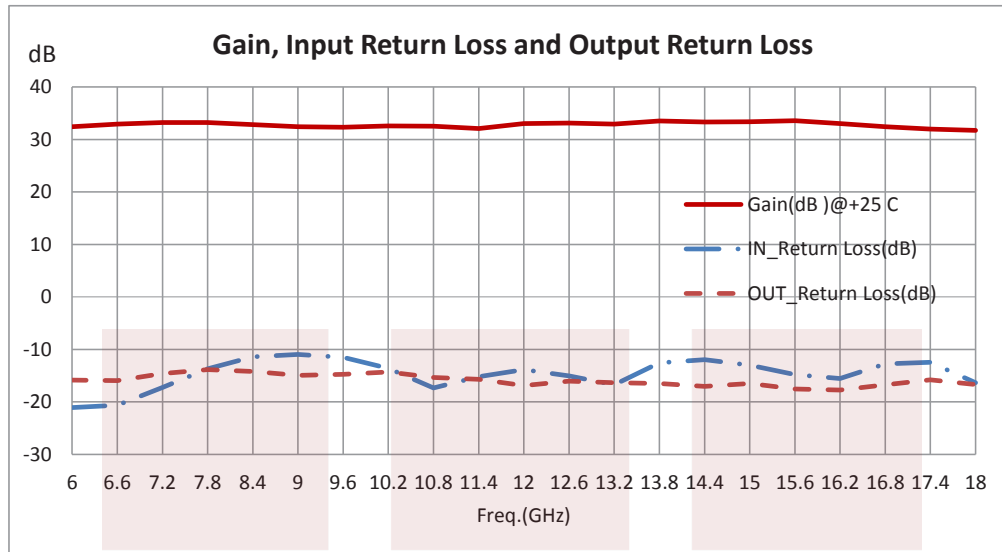
- 6 GHz to 18 GHz Frequency Range
- P1dB +30 dBm min.
- Gain 30 dB min.
- Gain Flatness +/-1.5 dB typ

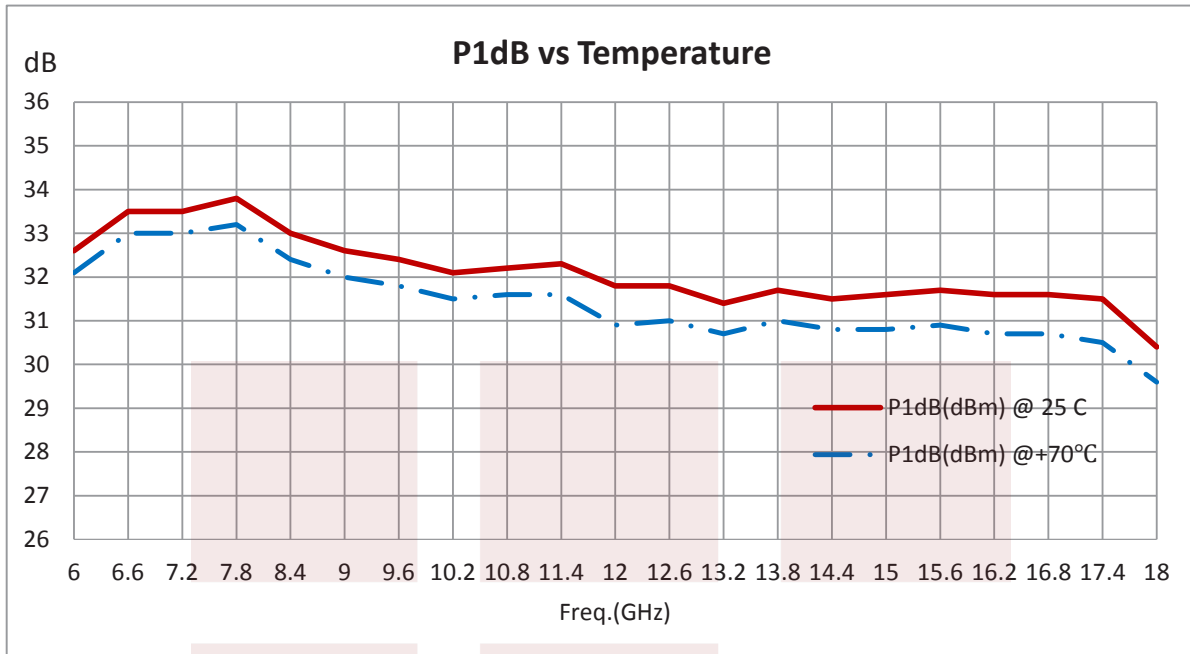
Applications:

- Medium Power Amplifier
- Driver Amp
- Military Communications
- Broadband Communication
- Test & Measurement

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



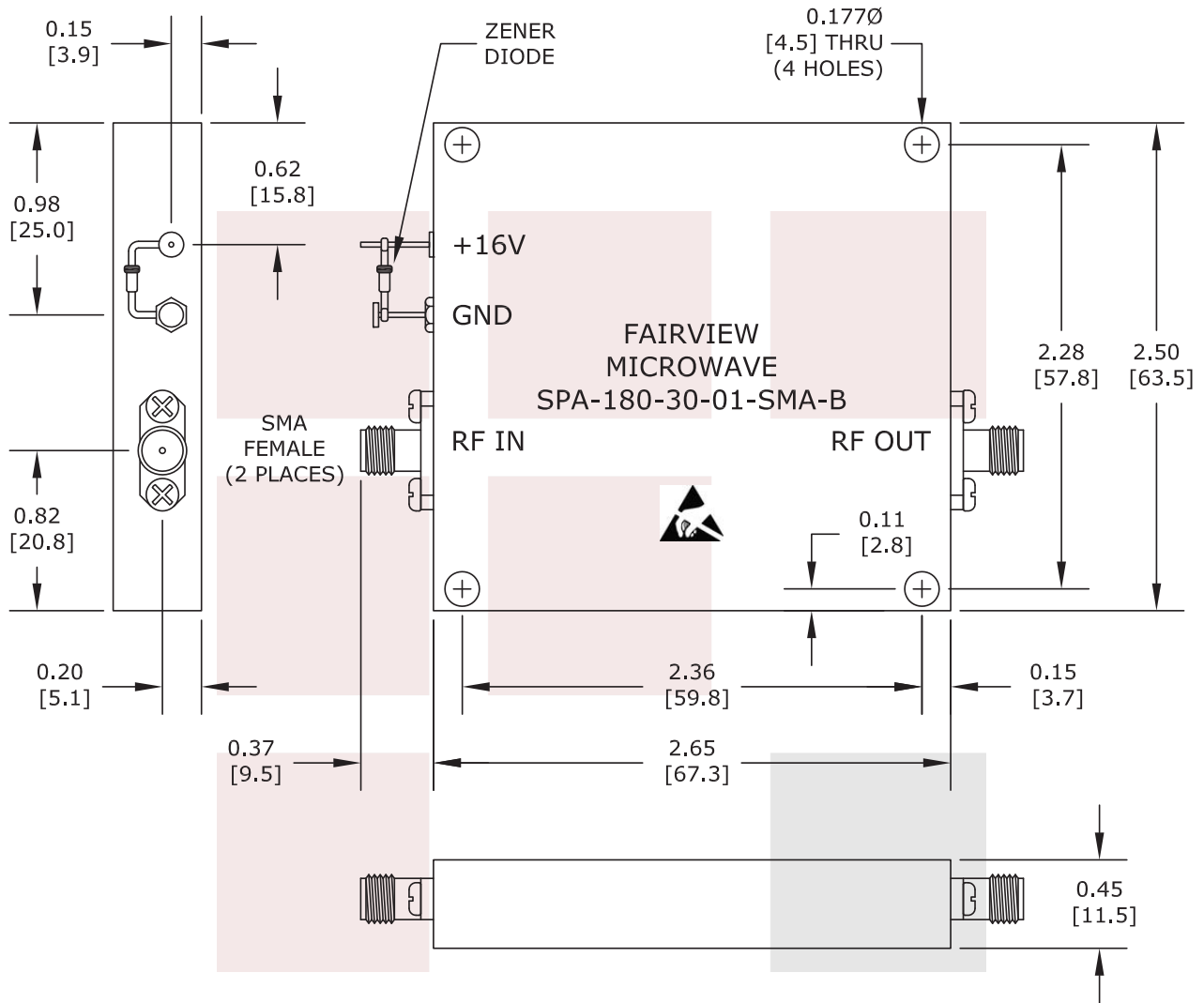


6 GHz to 18 GHz, Medium Power Broadband Amplifier with 1 Watt, 30 dB Gain and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [6 GHz to 18 GHz, Medium Power Broadband Amplifier with 1 Watt, 30 dB Gain and SMA SPA-180-30-01-SMA-B](#)

URL: <https://www.fairviewmicrowave.com/6-18-ghz-medium-power-broadband-amplifier-spa-180-30-01-sma-b-p.aspx>

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TITLE 6 GHz to 18 GHz, Medium Power Broadband Amplifier with 1 Watt, 30 dB Gain and SMA		DWG NO SPA-180-30-01-SMA-B	CAGE CODE 3FKR5		
CAD FILE 120414	SHEET	SCALE N/A	SIZE A	2233	