

40 dB Gain Limiting Amplifier Operating From 2 GHz to 8 GHz with -20 to 20 dBm Pin, 19 dBm Psat and SMA

The SLA-080-40-50-SMA is a 2 to 8 GHz high gain limiting coaxial amplifier. The model operates with an input power range of -20 to +20 dBm and maintains a limited output of +19 dBm minimum. This amplifier offers a 40 dB flat high gain and a gain flatness of ± 2.0 dB independent of the input. This excellent technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices, and supplied the power typically from a +12V DC power supply. This connectorized limiting includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The module is hermetically sealed for extreme environmental conditions.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 300mA)

Description	Min	Typ	Max	Unit
Frequency Range	2		8	GHz
Small Signal Gain	40			dB
Gain Flatness		± 2		dB
Input Power	-20		+20	dBm
Psat	+19			dBm
Psat Flatness			± 1	dB
Noise Figure			5	dB
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage	11	12	13	Volts
Operating DC Current			300	mA
Operating Temperature Range	-30		+70	°C

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	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



Features:

- 2 GHz to 8 GHz Frequency Range
- Wide Input Dynamic Range: -20 to +20 dBm
- Psat: 19dBm Min.
- High Small Signal Gain: 40 dB Min.
- Gain Flatness: ± 2 dB max
- Noise Figure: 5 dB maximum
- VSWR (In/Out) 2:1
- 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:

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- Wide Input Dynamic Range: -20 to +20 dBm
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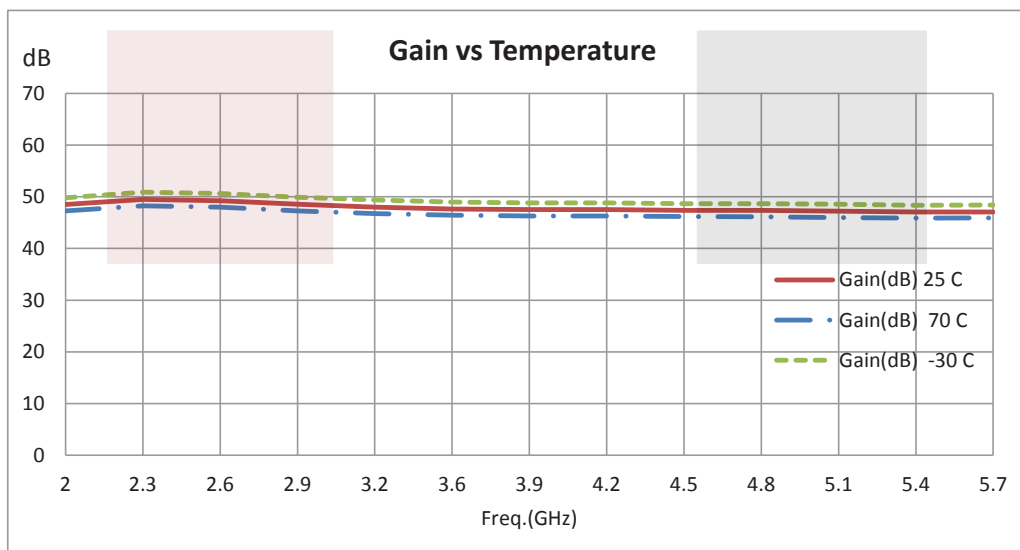
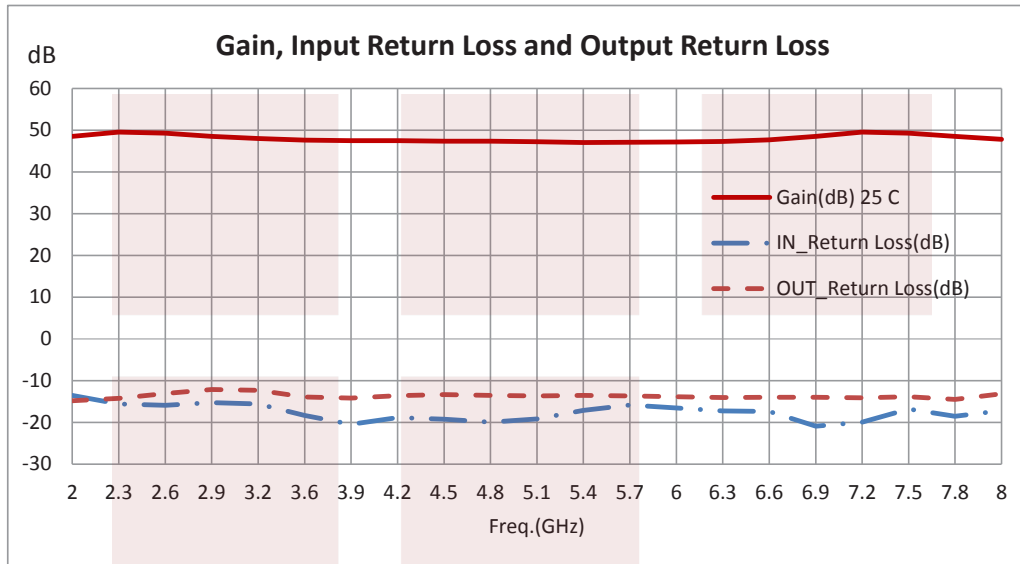
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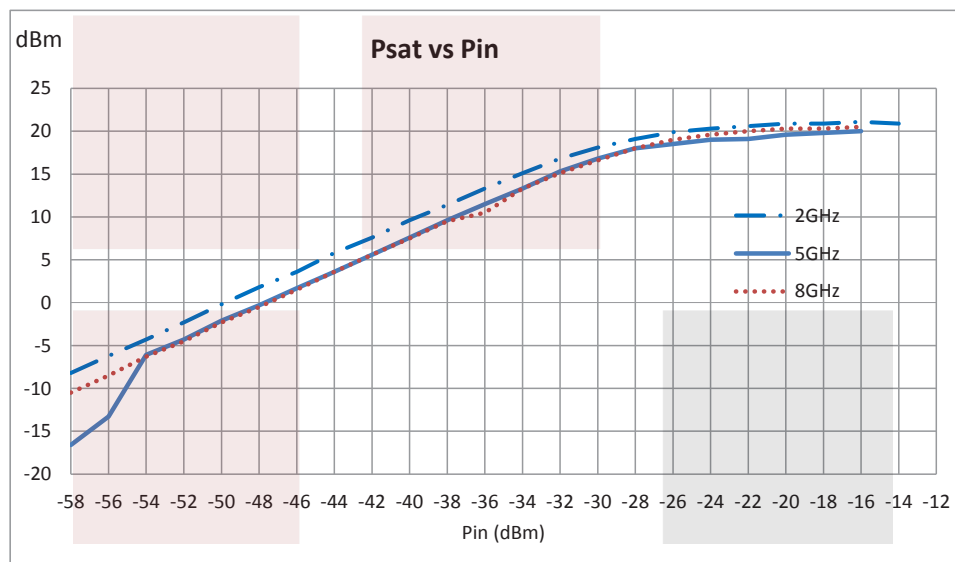
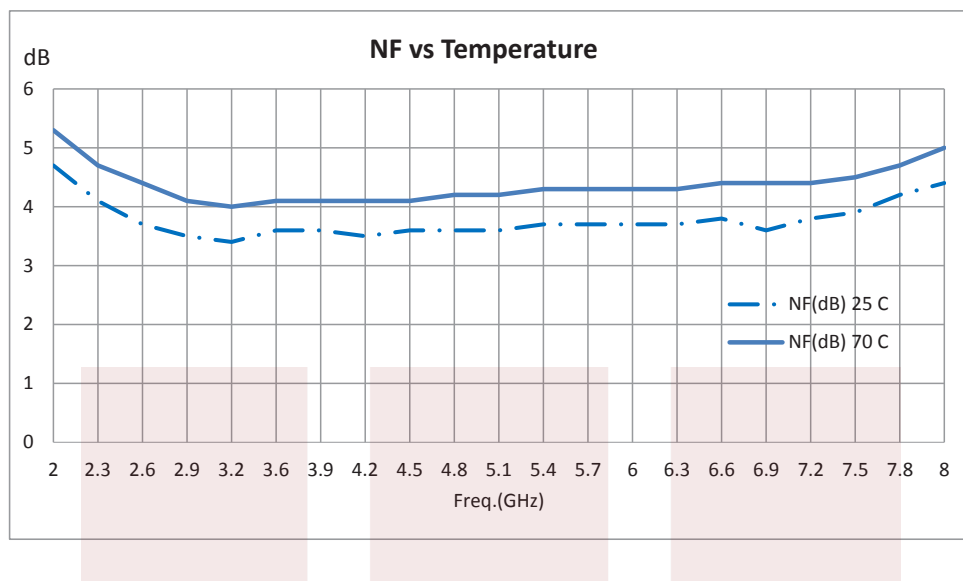
Plotted and Other Data

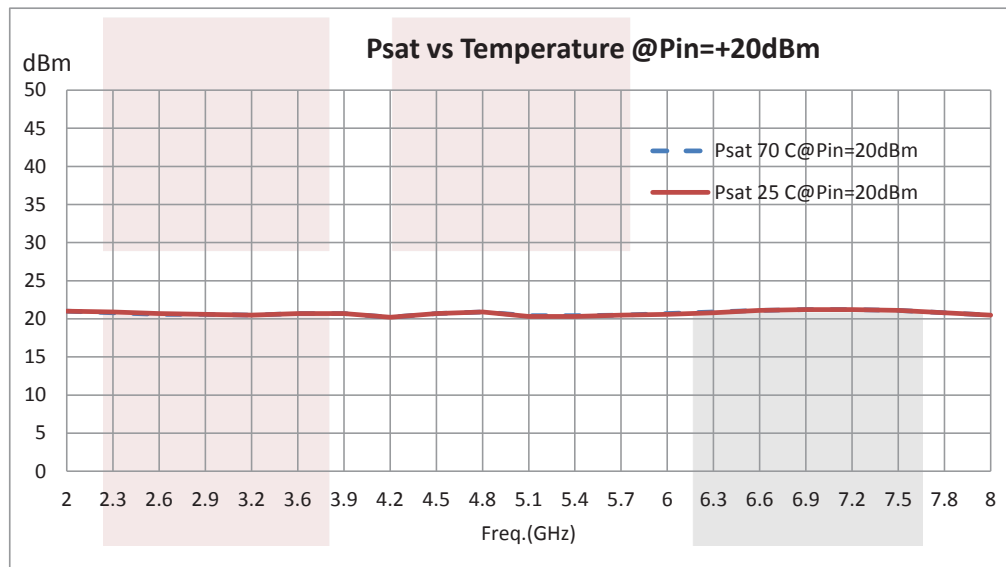
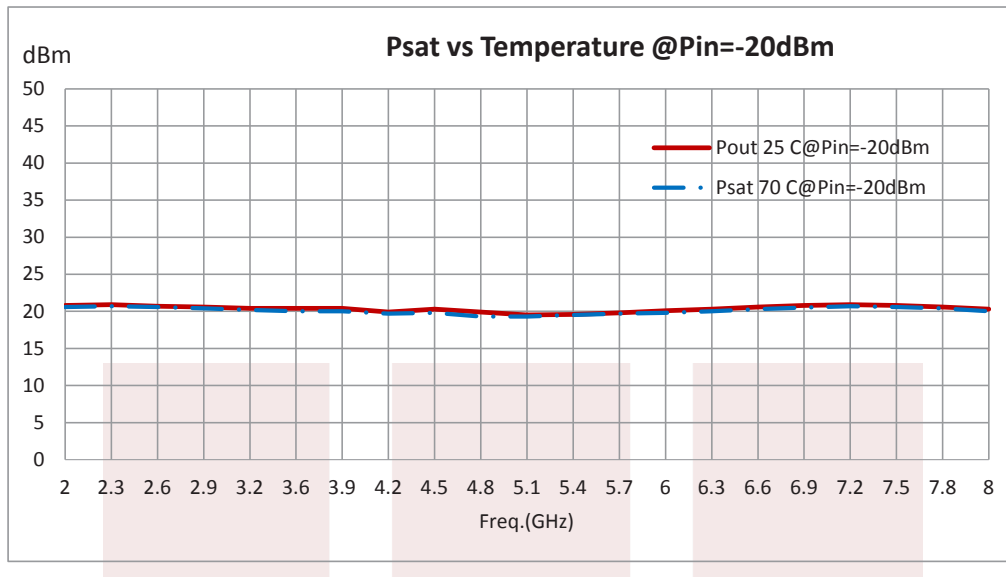
Notes:

- 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.

Typical Performance Data





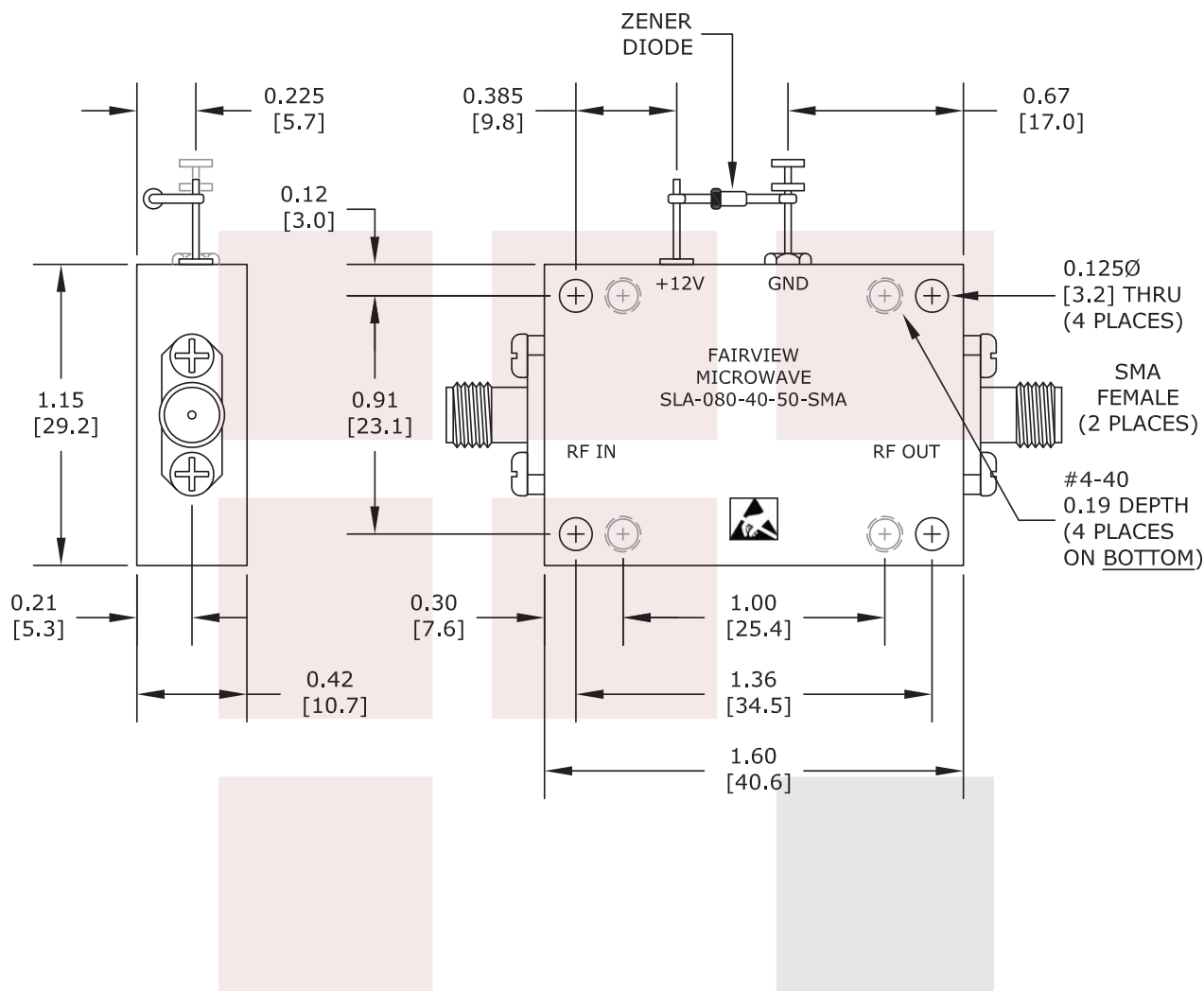


40 dB Gain Limiting Amplifier Operating From 2 GHz to 8 GHz with -20 to 20 dBm Pin, 19 dBm Psat and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [40 dB Gain Limiting Amplifier Operating From 2 GHz to 8 GHz with -20 to 20 dBm Pin, 19 dBm Psat and SMA SLA-080-40-50-SMA](http://www.fairviewmicrowave.com/40-db-gain-limiting-amplifier-2-8-ghz-sla-080-40-50-sma-p.asp)

URL: <http://www.fairviewmicrowave.com/40-db-gain-limiting-amplifier-2-8-ghz-sla-080-40-50-sma-p.asp>

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

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NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE
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to 8 GHz with -20 to 20 dBm Pin, 19 dBm Psat and
SMA

DWG NO	SLA-080-40-50-SMA	CAGE CODE	3FKR5
CAD FILE	050914	SHEET	SCALE N/A SIZE A 2233