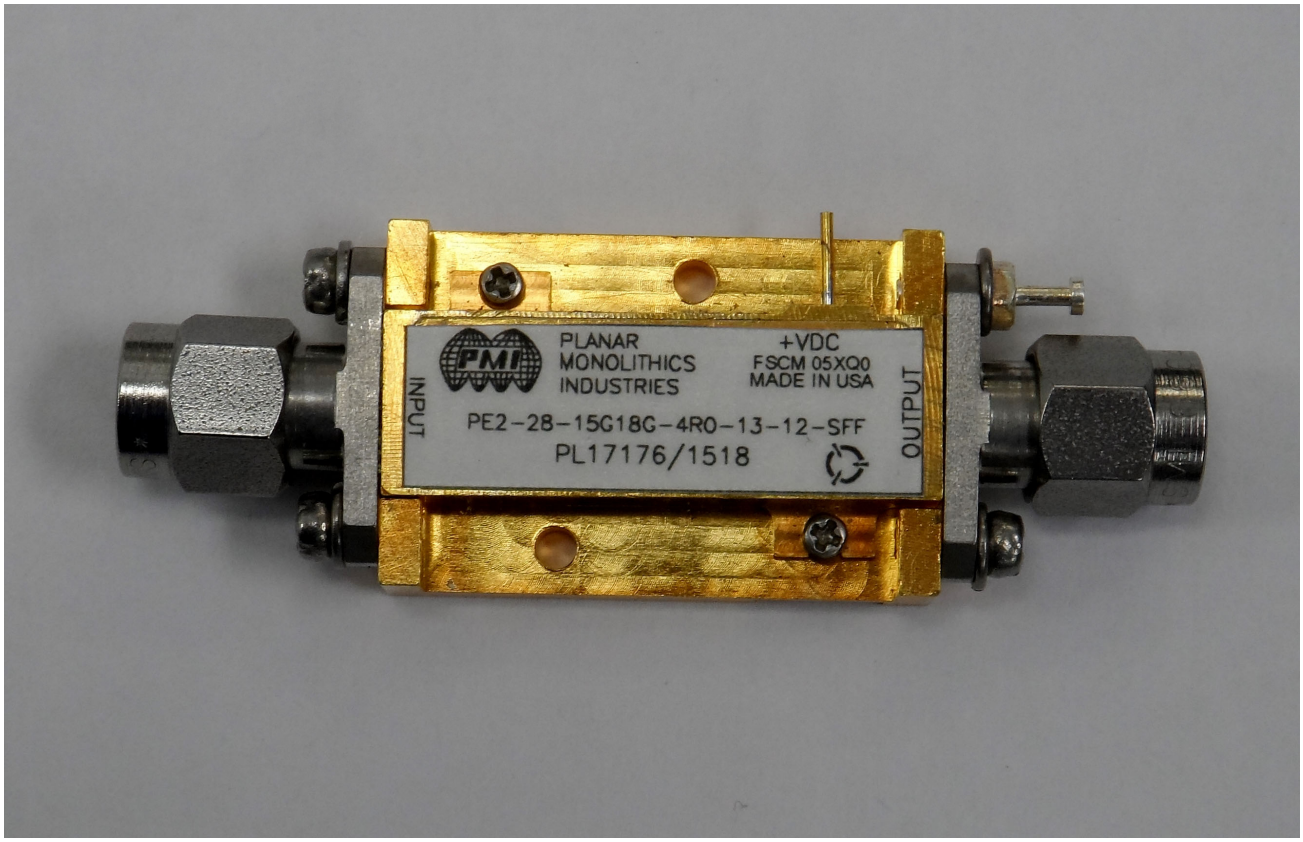
Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

PE2-28-15G18G-4R0-13-12-SFF is a 15 to 18 GHz low noise amplifier. This amplifier is supplied in our standard PE2 housing that can be used as a SMA connectorized or surface mount component.



April 28, 2015

Designed by: PMI Engineering

Reported by: Kevin Mansfield

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
email: sales@pmi-rf.com

Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

Description:

Model No: PE2-28-15G18G-4R0-13-12-SFF is a 15 to 18 GHz low noise amplifier. This amplifier is supplied in our standard PE2 housing that can be used as a SMA connectorized or a surface mount component.

This model provides the following performance. Data is available upon request.

Specifications:

Frequency Range:	15 to 18 GHz
Gain:	26dB Typ. @ 10 - 18 GHz
Gain Flatness:	± 0.5 dB Max @ +25°C
	± 0.75dB Max @ -55°C to +85°C
Noise Figure:	4.0dB Max.
OP1dB:	+13dBm Min.
VSWR Input/Output:	1.5:1 Typ, 1.8:1 Max.
Max Input Power:	+20dBm CW
DC Voltage Supply:	+12 to +15VDC
DC Current Draw:	200mA Max.
Isolation:	-65dB Typ @ 10 to 13 GHz
	-60dB Typ. @ 15 to 18 GHz
Connectors In/Out:	SMA Male
Finish:	Gold Plated

Features:

Internal Voltage Regulation
Unconditional Stability
Standard Operating Temperature -55°C to +85° C

Available Options:

Various Package types
Various Connector types
Temperature Compensation
Gain and Phase Matching
MIL-STD-883 Screening Available

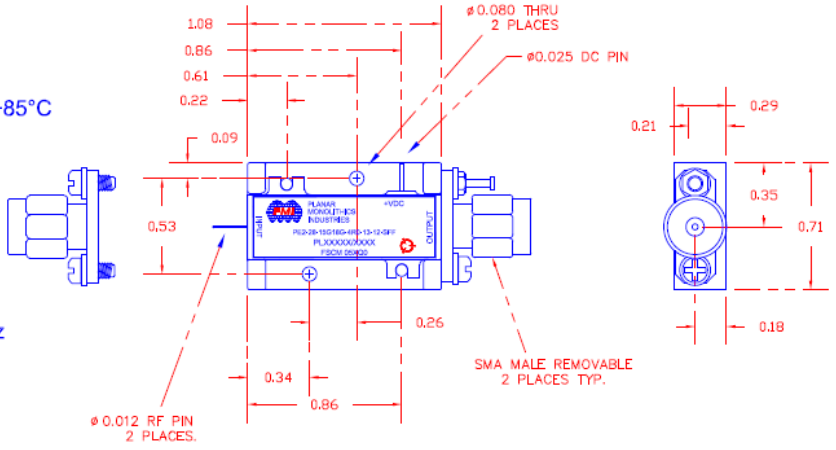
Environmental Ratings:

Temperature:	-55°C to +85°C (Operating)
	-65°C to +125°C (Storage)
Humidity:	MIL-STD-202F, METHOD 103B COND B.
Shock:	MIL-STD-202F, METHOD 213B COND B.
Altitude:	MIL-STD-202F, METHOD 105C COND B.
Temperature Cycle:	MIL-STD-202F, METHOD 107D COND A

Note: The above specifications are subject to change or revision.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	06/06/11	
	A2	ECN # 14-0064	04/03/14	

MECHANICAL OUTLINE



ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.
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FREDERICK, MARYLAND 21704 USA
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ISO 9001 CERTIFIED

APPROVALS	DATE
DRAWN KM	11/05/07
MODIFIED afk	06/06/11
ISSUED	

TITLE: PRODUCT FEATURE
PE2-28-15G18G-4R0-13-12-SFF

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27007742	A2

SCALE N: S | SHEET 1 OF 1

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Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	15 GHz – 18 GHz	**15 GHz – 18 GHz (See Plot)**	
2	Gain Nominal:	26dB Typ. @ 10 – 18 GHz	**26.7dB (See Plot)**	
3	Gain Flatness:	±0.5dB Max. @ +25°C ±0.75dB Max. @ -55°C to +85°C	**±0.26db** **±0.52db**	
4	Noise Figure:	4.0dB Max.	**3.92dB (See Plot)**	
5	Pout @ 1dB Compression:	+13dBm Min.	**>+13dBm**	
6	VSWR: (Input/Output)	1.5:1 Typ 1.8:1 Max.	**1.6:1 (See Plot)**	
7	Max Input Power:	+20dBm CW	**Pass**	
8	Isolation:	-65dB Typ @ 10 to 13 GHz -60dB Typ. @ 15 to 18GHz	**-70dB** **-59dB (See Plot)**	
9	DC Supply:	+12 to +15V @ 200mA Max.	**+12 to +15V @ 127mA**	

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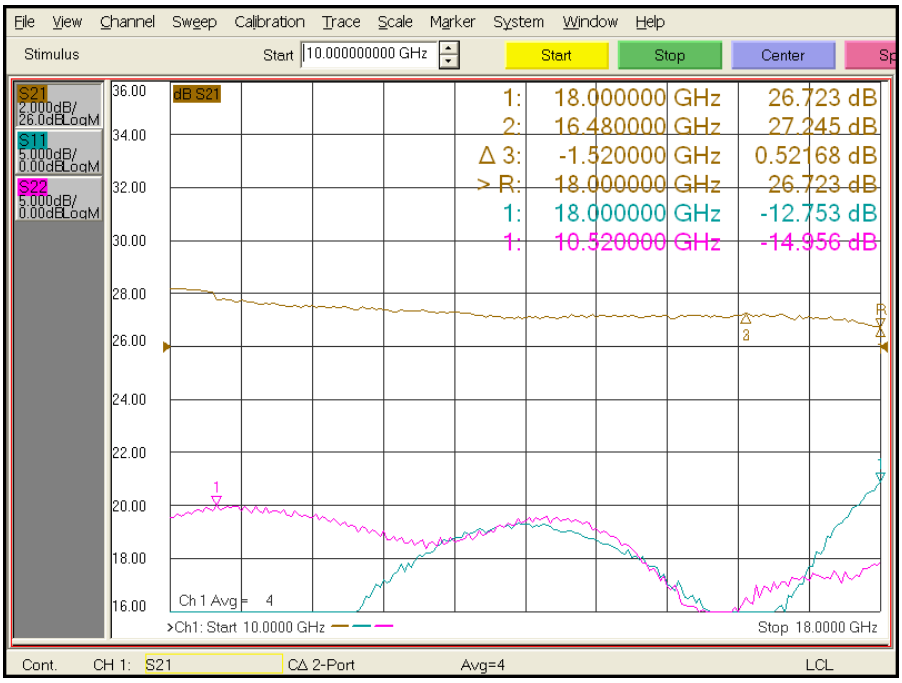
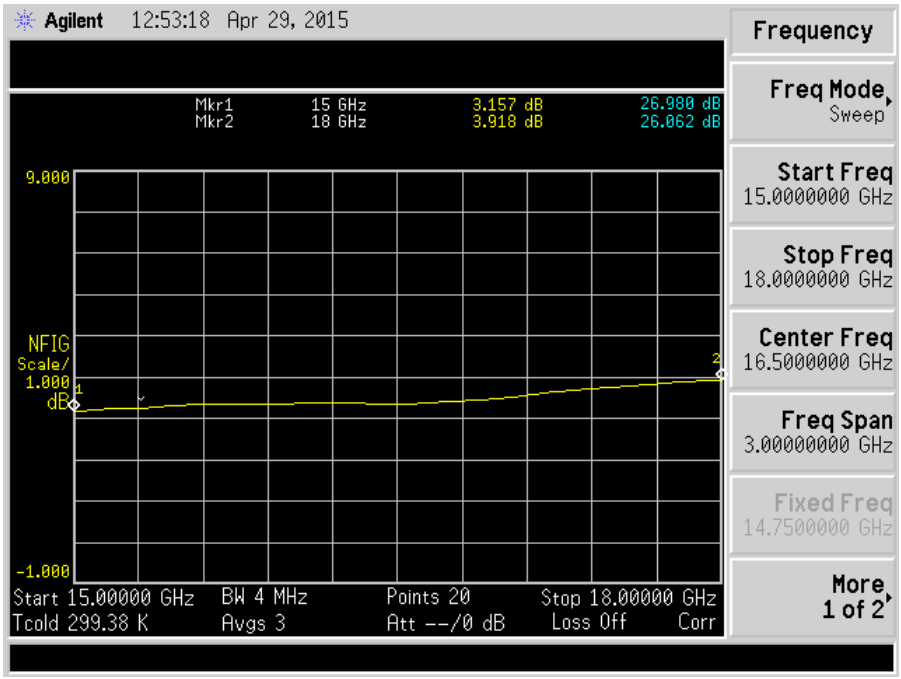
Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

Gain and Return Loss



Noise Figure



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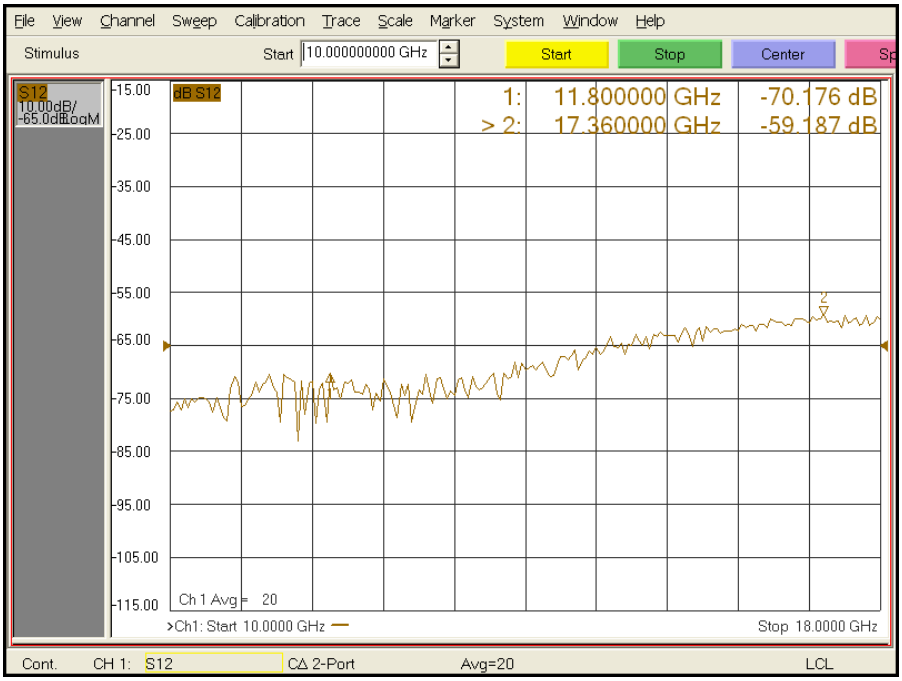
Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

Reverse Isolation



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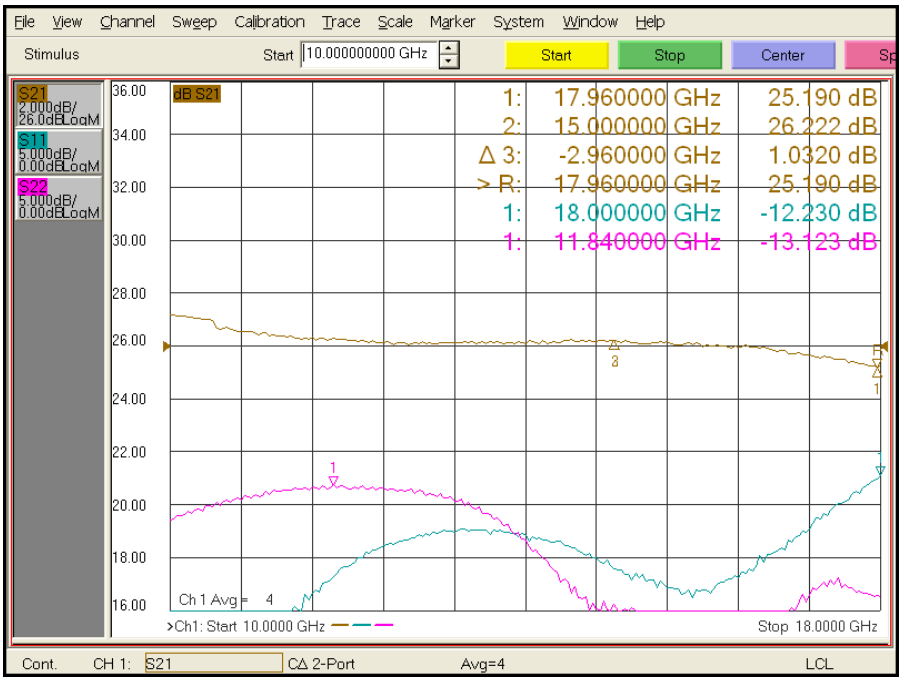
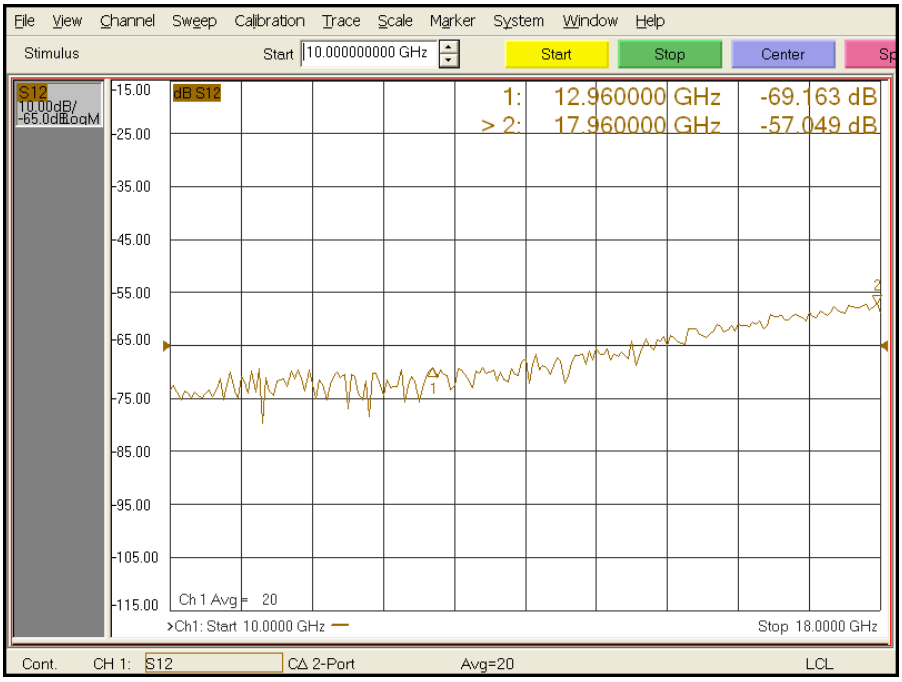
Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

Gain and Return Loss @ -55° C



Isolation @ -55° C



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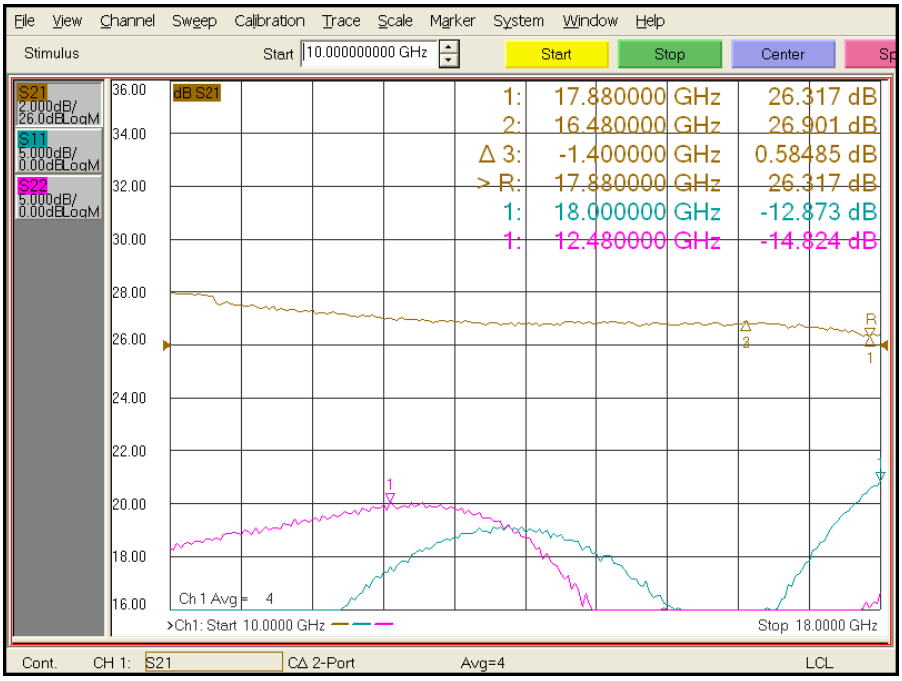
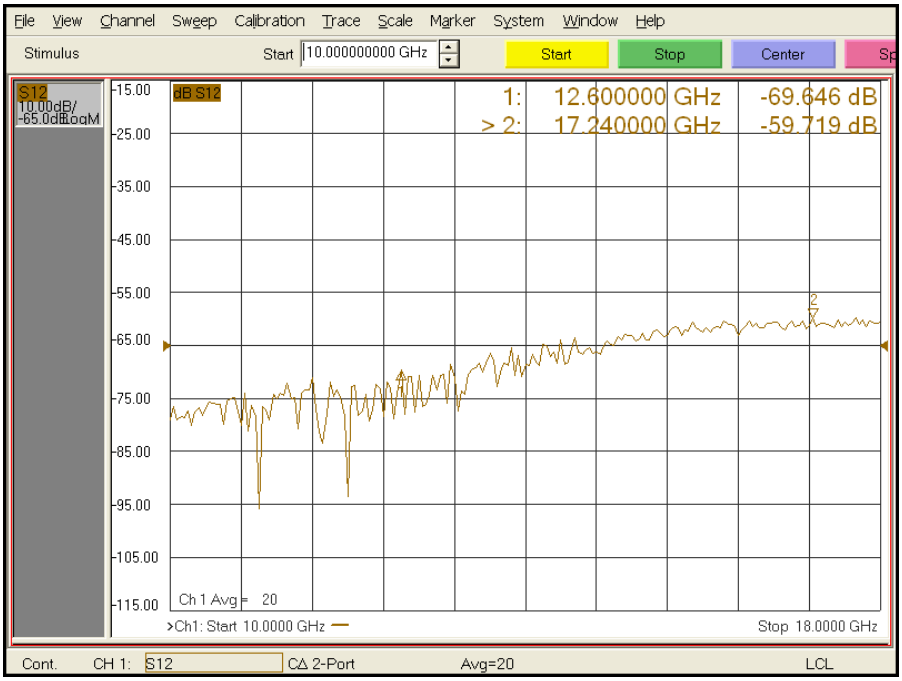
Typical Characteristics on PE2-28-15G18G-4R0-13-12-SFF

Gain and Return Loss @ +85° C



Isolation @ +85° C



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