



**PASTERNAK ENTERPRISES, INC.**

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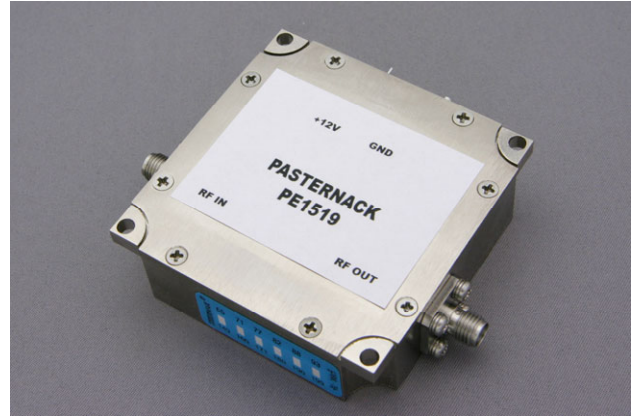
# PE1519 Low Noise Amplifier 1 – 4 GHz

## Product Features

- 1 – 4 GHz frequency range
- 2.5 dB Noise Figure
- 25 db Typical Gain
- 1.0 dB Typical Gain Flatness
- 100mA at +12VDC

## Description

The PE1519 low noise amplifier is designed for applications within the 2 to 4 GHz frequency range. High efficiency operation is achieved by using low-noise GaAs PHEMT devices. This amplifier is a cost effective solution that offers typical performance of 25 dB gain, 1.0 dB gain flatness and a 2.5 dB noise figure.



## Electrical Specifications <sup>(1)</sup>

Parameter	Units	Value	Description
Impedance	Ohms	50	
Frequency	GHz	1.0 to 4.0	
Small Signal Gain	dB	25	Typical
Gain Flatness	dB	1	Maximum
Pout at 1dB Gain Compression (P1dB)	dBm	15	Typical
Noise Figure	dB	2.5	Typical
VSWR, In	-	2:1	Maximum
VSWR, Out	-	2:1	Maximum
Vdc (internal regulator)	Volts	+11 to 15	Typical
Idc	mA	120	Maximum

## Mechanical Specifications <sup>(1)</sup>

Parameter	Units	Value	Description
Operating Temperature	Celsius	-30° to +70°	
Input Connector	-	SMA Female	
Output Connector	-	SMA Female	
Case Style		PMN715	

## Ordering Information

Part Number	Description
PE1519	Low Noise Amplifier, 1 – 4 GHz

(1) Pasternack reserves the right to change specifications or information without notice.  
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# PE1519 Low Noise Amplifier 1 – 4 GHz

Technical drawing of the PE1519 Low Noise Amplifier. The drawing includes a top view and a side view. The top view shows a square footprint with dimensions: .930 (width from left edge to +12V pin), .560 (width from +12V pin to GND pin), 2.375 SQ. (total width), and 2.140 (total height). There are four .136 diameter through holes. Labels include +12V, GND, RF IN, RF OUT, and PASTERNAK PE1519. A .250-36 UNS-2A screw is shown on the right side. The side view shows a height of .715 and a .230 width at the top.

### SPECIFICATIONS

FREQUENCY: 1–4 GHz  
 GAIN: 25  
 GAIN FLATNESS: 1  
 P1dB (dBm TYP.): 15  
 INPUT VSWR: 2:1  
 OUTPUT VSWR: 2:1  
 NOISE FIGURE: 2.5  
 CURRENT AT +12VDC: 100mA  
 OPERATING TEMPERATURE: -30° C TO +70° C

		<b>PASTERNAK ENTERPRISES, INC.</b>	
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		COAXIAL & FIBER OPTICS	
DWG TITLE		DES. LOW NOISE AMPLIFIER	
<b>PE1519</b>			
REV. A	FSCM NO. 53919	CAD FILE 031208	SCALE N/A SIZE A 147
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.			