

# EPA-0742P1-SF

50  $\Omega$  Broadband High Power Amplifier, 0.7 – 4.2 GHz

REV 1.00



This broadband power amplifier utilizes the latest GaN devices to deliver exceptional performance in the frequency band from 0.7 - 4.2 GHz.

## Features and Applications

- Broadband, high IP3 (+30dBm typ.)
- High gain, 46 dB typ.
- High power, 30 dBm typ.
- Satellite, Comm. Systems, WiFi/WiMax, Military
- Instrumentation
- Laboratory

## ELECTRICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
FREQUENCY RANGE	0.7 – 4.2 GHz
GAIN (typical)	46 dB @ 0.7 GHz
	46 dB @ 1.0 GHz
	46.9 dB @ 2.0GHz
	46.5 dB @ 3.0GHz
	46.9 dB @ 4.2 GHz
GAIN FLATNESS (max)	$\pm 1$ dB
Pout (1dB comp.)	+ 30 dBm
Pout (IP3) min	+ 42 dBm
INPUT VSWR	< 1.5 :1
OUTPUT VSWR	< 2.9 :1
NOISE FIGURE (max)	<7.8 dB
DC CURRENT (max)	700 mA
DC VOLTAGE (nom.)	15 V

Note: Measured at 25 °C

## MAXIMUM RATINGS

PARAMETER	SPECIFICATION
DC VOLTAGE	+ 20 V
RF INPUT POWER	0 dBm
OPERATING TEMP (case)	-20 °C to + 60 °C
NON-OPERATING TEMP	-55 °C to +100 °C

Note: External air cooling  
maybe required if  
environmental temperature  
exceeds +30C

## MECHANICAL

PARAMETER	SPECIFICATION
RF CONNECTORS	SMA female
ENCLOSURE TYPE	Aluminum (indoor)
SURFACE FINISH	Black anodized aluminum
DIMENSIONS	6.49 x 2.87 x 1.89 inches
	165 x 73 x 48 mm
WEIGHT	1.39 LB (630 grams)

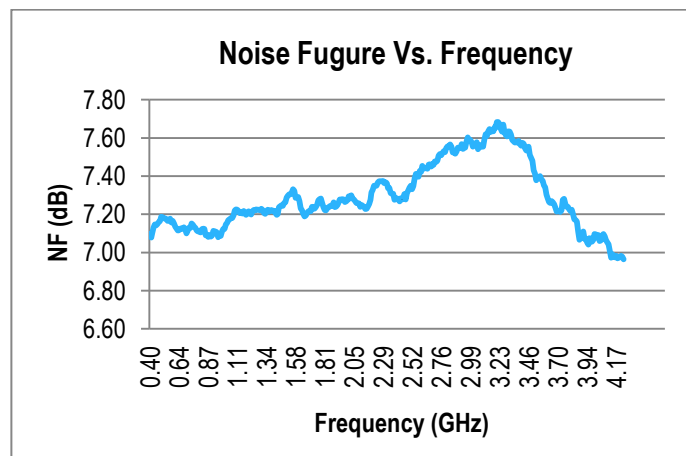
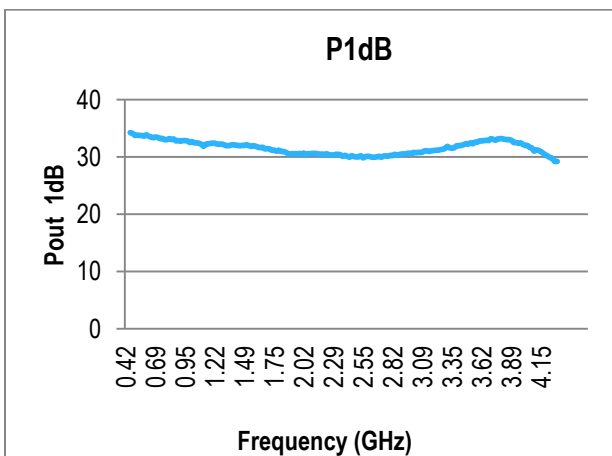
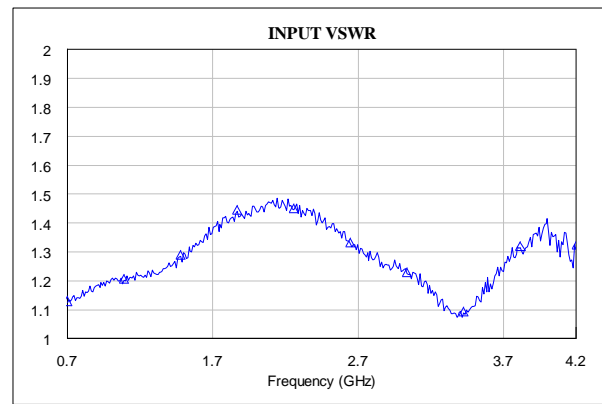
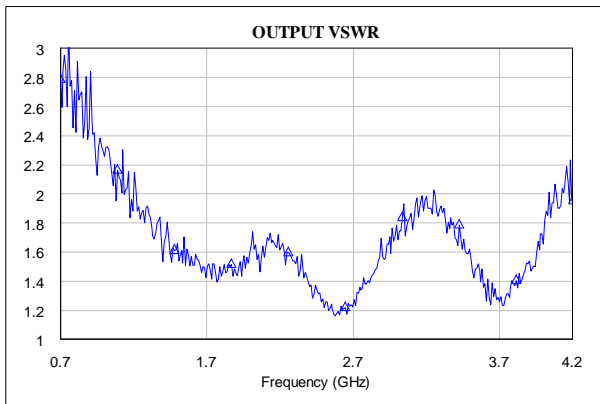
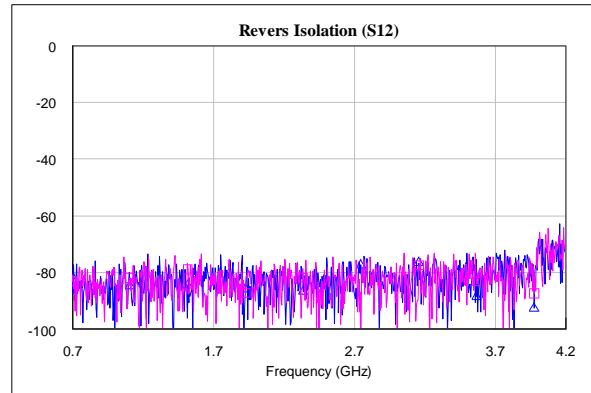
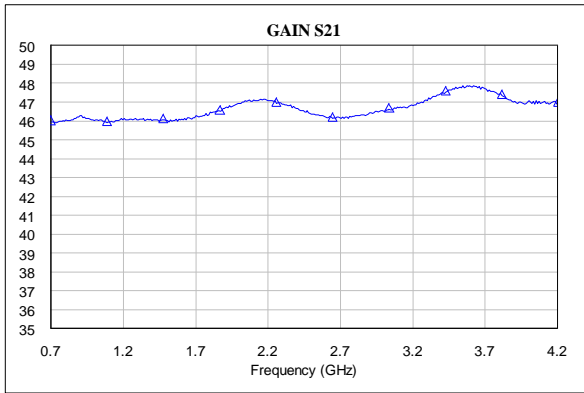
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## TYPICAL PERFORMANCE DATA



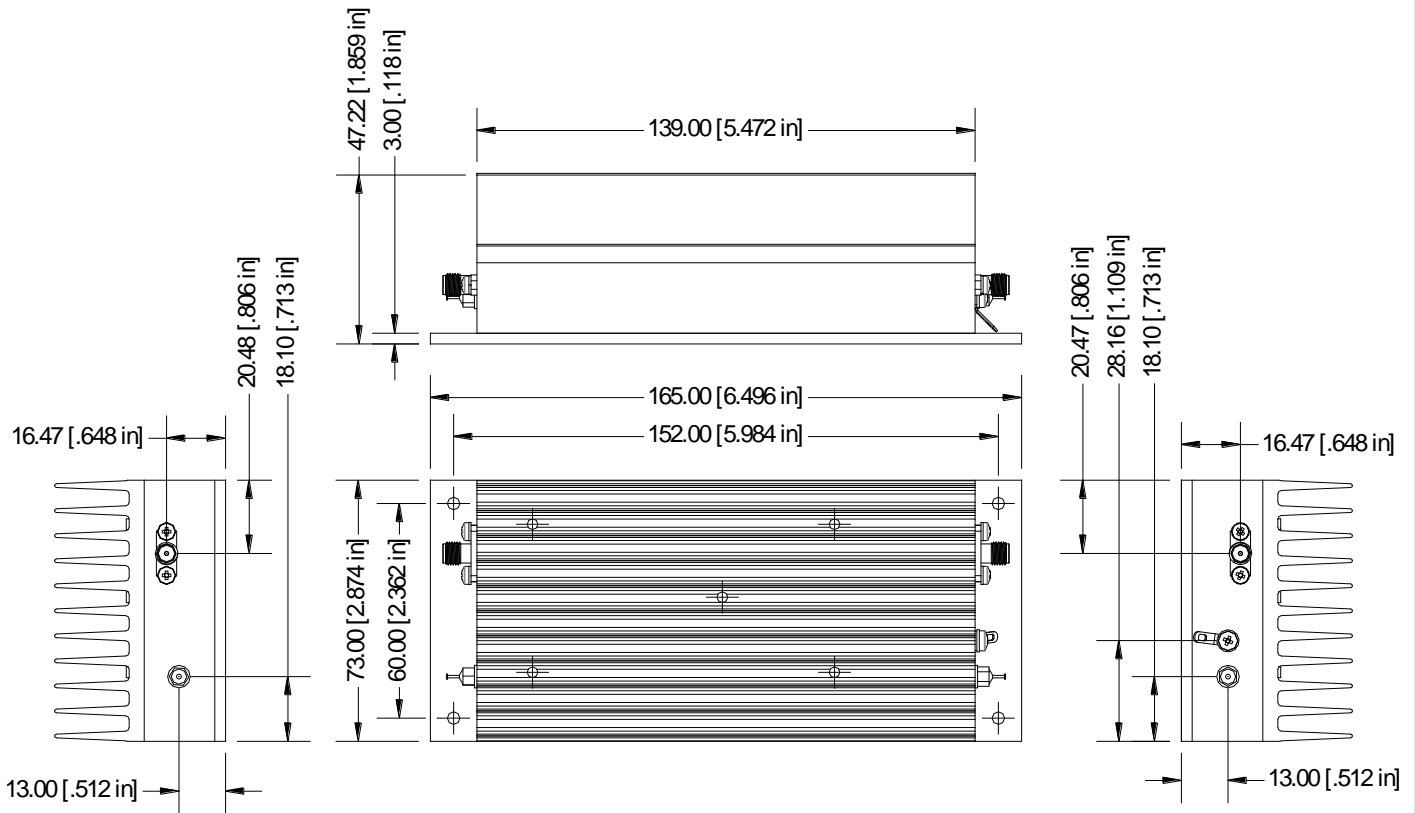
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## MECHANICAL OUTLINE



## ORDERING INFO

**EPA**

PRODUCT CODE

POWER AMPLIFIER

**0742P1**

UNIT CODE

0.7 - 4.2GHz

**SF**

CONNECTOR

SMA (F)

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