

Low Noise GaAs MMIC Amplifier

1.2 - 1.75 GHz

AM85-0005

V4.00

Features

- 1.6 dB Typical Noise Figure
- 25 dB Typical Gain
- DC Decoupled RF Input and Output
- Single Bias Configuration
- Field-Replaceable RF Connectors
- Internal Regulation
- Covers Both L1 & L2 GPS Bands
- Optional DC Bias Through RF Input or Output Port

Description

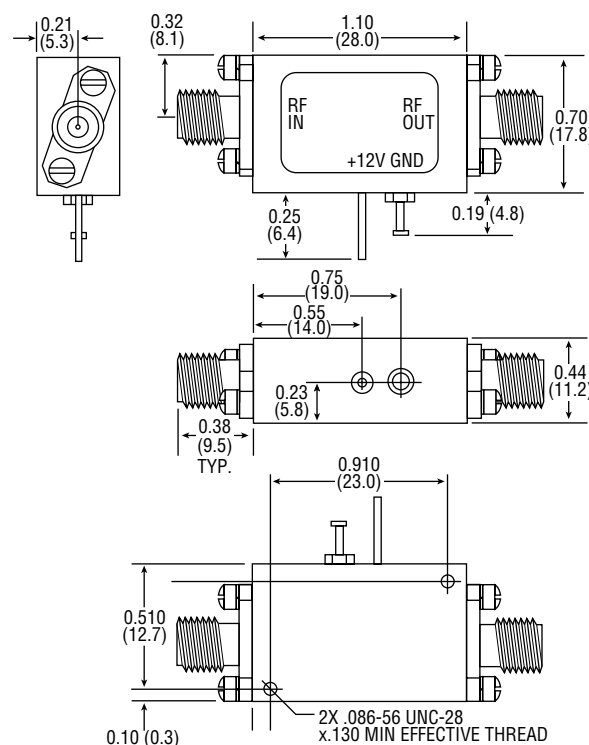
M/A-COM's AM85-0005 is a low noise MMIC amplifier in a low cost connectorized housing. The AM85-0005 is designed for use in GPS applications covering both L1 and L2 frequencies, INMARSAT and other linear L-Band applications.

Ordering Information

Part Number	Package
AM85-0005	Connectorized LNA
AM85-0005-DCO	DC Bias on RF Output
AM85-0005-DCI	DC Bias on RF Input ¹

1. Noise figure will be degraded 0.1 dB.

C-54



Dimensions in () are in mm.

Unless otherwise specified: .xx = ±0.020 (0.508)

.xxx = ±0.010 (0.254)

Electrical Specifications

Bias conditions: +12V @ 90 mA Typical, Frequency = 1.2 - 1.75 GHz, T_A = +25°C, Z₀ = 50 Ω

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Gain	P _{IN} = -20 dBm	dB	22	25*	-
Gain Flatness	P _{IN} = -20 dBm	dB	-	±1.0	-
Noise Figure		dB		1.6	2.0
VSWR Input	P _{IN} = -20 dBm	-	-	-	2.0:1
Output	P _{IN} = -20 dBm	-	-	-	2.0:1
Output Power @ 1dB Gain		dBm	10	13.0	-
Compression		-	-	-	-
Reverse Isolation		dB	30	40	-
Output Third Order Intercept		dBm	20	23.0	-

* Higher gain options available. Consult factory.

Specifications Subject to Change Without Notice.

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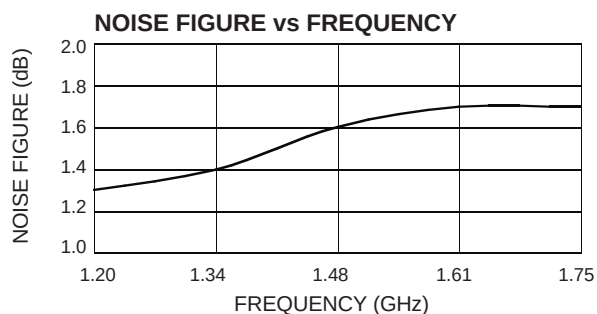
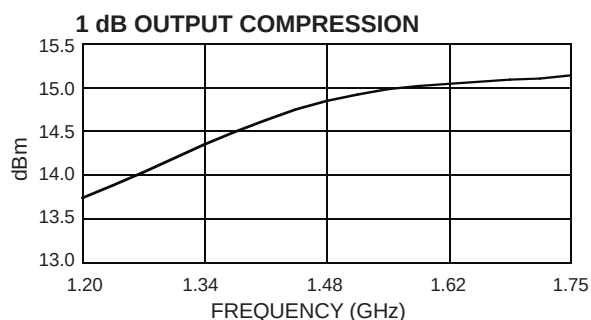
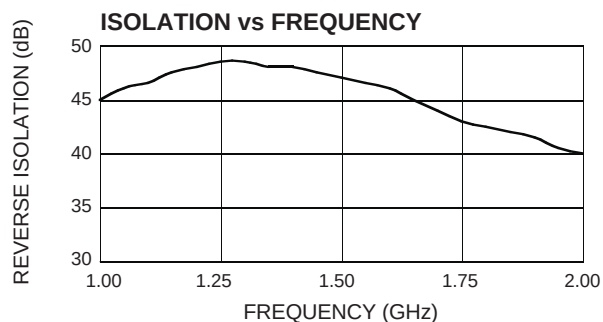
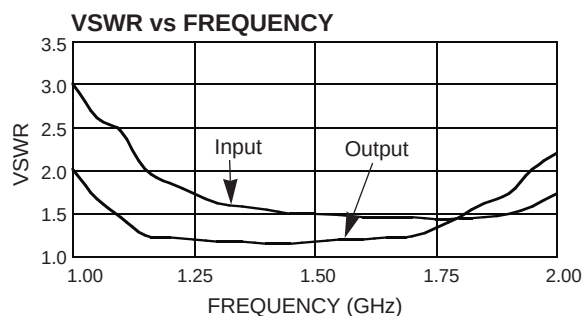
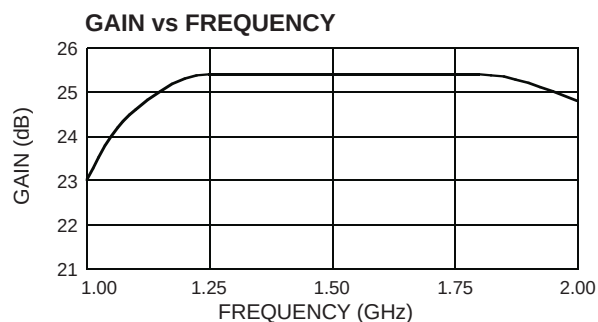
Absolute Maximum Ratings¹

Parameter	Absolute Maximum
Max. Input Power ²	+20 dBm
Operating Voltage ²	20 V max
Operating Temperature	-55°C to +100°C
Storage Temperature	-65°C to +150°C

1. Exceeding these limits may cause permanent damage.

2. Ambient temperature (T_A) = +25°C

Typical Performance @ +25°C



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