

Low Noise GaAs MMIC Amplifier

2 - 3 GHz

AM85-0004

V3.00

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
- Optional DC Bias Through RF Input or Output Port

Description

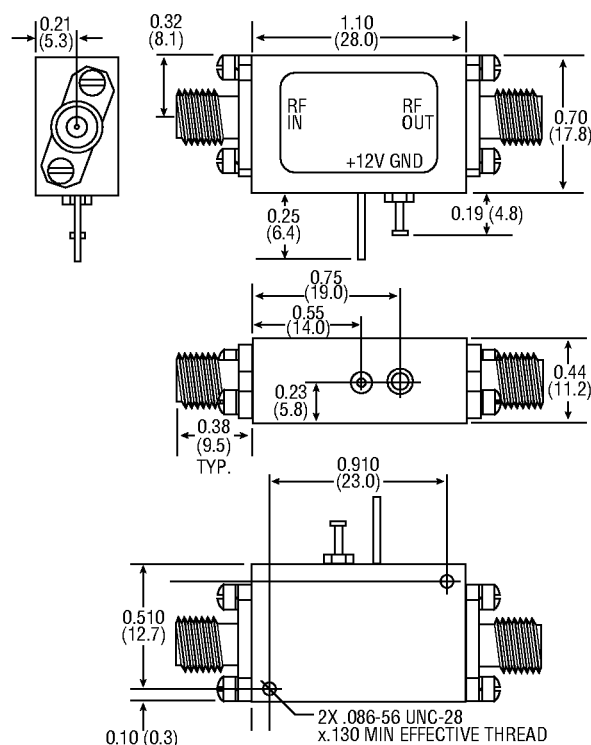
M/A-COM's AM85-0004 is a low noise MMIC amplifier in a low cost connectorized housing. The AM85-0004 is designed for use in ISM and other linear telecommunication applications such as wireless LAN. It is also available for use in military telemetry, communications, IFF and radar applications.

Ordering Information

Part Number	Package
AM85-0004	Connectorized LNA
AM85-0004-DCO	DC Bias on RF Output
AM85-0004-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 @ 70 mA Typical, Frequency = 2 - 3 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	-

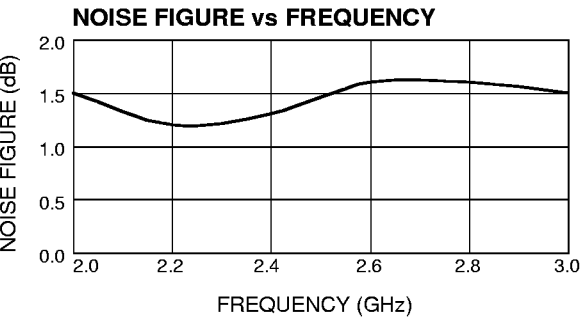
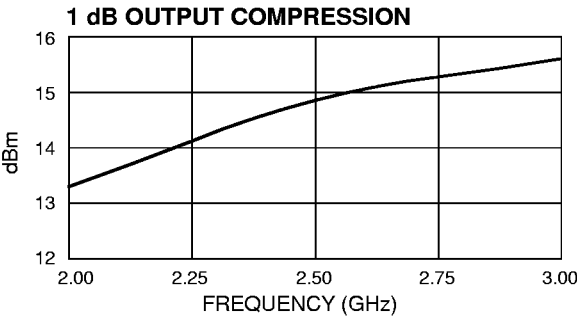
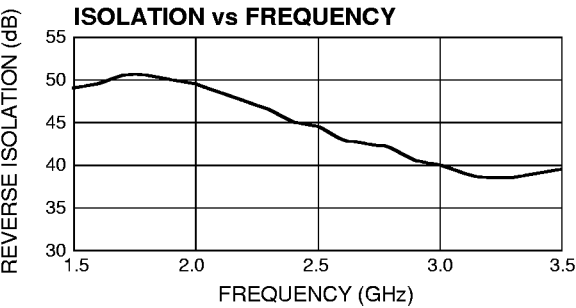
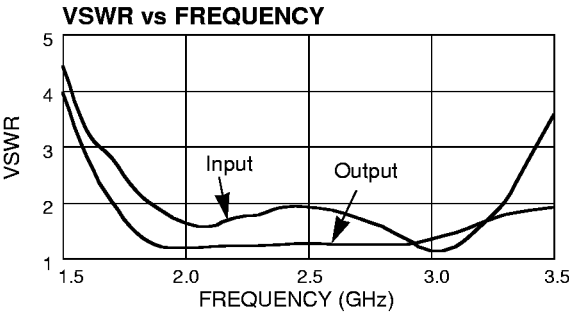
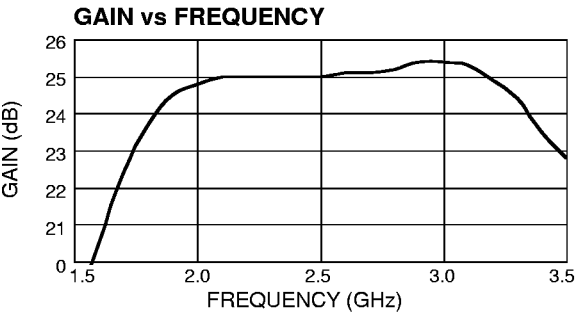
* Higher gain options available. Consult factory.

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



Specifications Subject to Change Without Notice.