6884-700

Microwave Amplifier
2.0 to 12.0 GHz

Rev. V4

Features

- ULTRAWIDE BANDWIDTH: 1.5 to 16.0 GHz (TYP.)
- HIGH GAIN: 27.0 dB (TYP.)
- POWER OUTPUT: +14.2 dBM (TYP)
- NOISE FIGURE: 4.5 dB (TYP)
- INTERNAL VOLTAGE REGULATION
- FIELD REPLACEABLE SMA RF CONNECTORS

Product Image

Description

The 6884-700 microwave amplifier is a hybrid design, which utilizes GaAs MMIC technology and thin film manufacturing processes for accurate performance and high reliability.
This amplifier design displays an impressive combination of performance characteristics over a broadband frequency range.
The MIC style package is hermetically sealed, and incorporates field replaceable SMA Connectors.

Ordering Information

Part Number	Package
6884-700	SMA Connectorized

Electrical Specifications: Z_0 = 50Ω, V_{CC} = +15 V_{DC}

Parameter	Units	Typical	Guaranteed	
		25ºC	0ºC to 50ºC	-40º to +70ºC*
Frequency	GHz	1.5 to 16 GHz	2.0-12.0 GHz	2.0 to 12.0 GHz
Small Signal Gain (min)	dB	27.0 dB	26.0	25.0
Gain Flatness (max)	dB	± 1.5	± 1.8	± 2.0
Reverse Isolation	dB	50		
Noise Figure (max) 2.0-12.0 GHz	dB	4.5	5.0	5.5
Power Output @ 1 dB comp. (min)	dBm	+14.2	+13.5	+13.0
IP3	dBm	+25.0		
VSWR Input / Output (max)		2.2:1	2:5:1	2.8:1
DC Current @ 15 Volts (max)	mA	150	160	170

Absolute Maximum Ratings

Parameter	Absolute Maximum
Storage Temperature	-62ºC to +125ºC
Case Temperature	+125ºC
DC Voltage	+18 V
Continuous Input Power	+13 dBm
Short Term Input power (1 minute max.)	100 mW
Peak Power (3 µsec max.)	0.25 W
"S" Series Burn-In Temperature (case)	+125ºC

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

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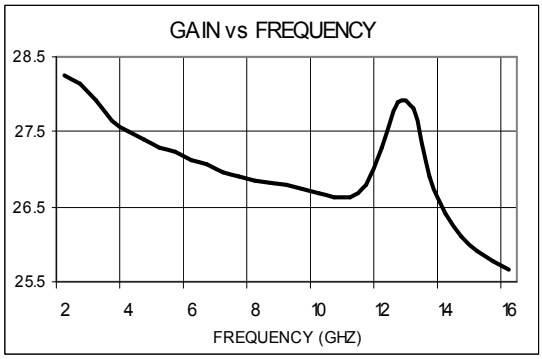
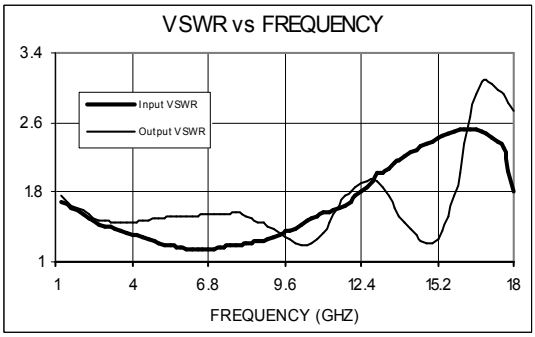
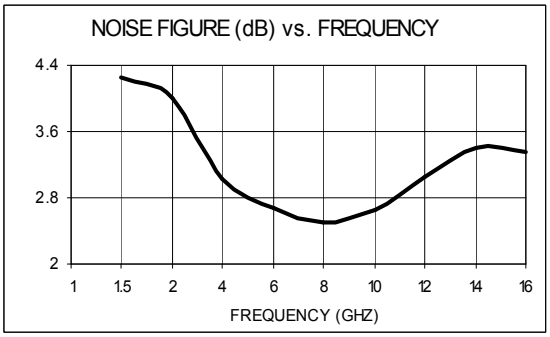
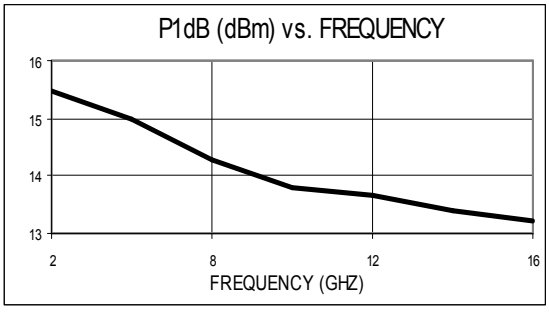
Typical Performance Curves at +25°

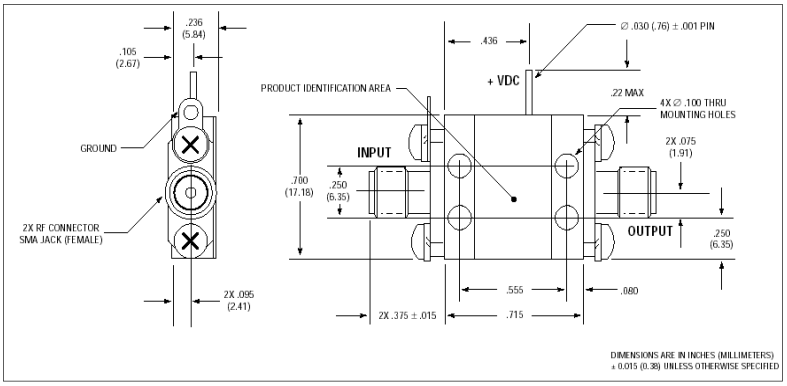








Outline Drawing: SMA Connectorized



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