

Microwave Amplifier 2.0 to 12.0 GHz

6884-700

v2

Features

- ULTRAWIDE BANDWIDTH: 1.5 to 16.0 GHz (TYP.)
- HIGH GAIN: 27.0 dB (TYP.)
- POWER OUTPUT: +14.2 dBm (TYP)
- NOISE FIGURE: 2.7 dB (TYP)
- INTERNAL VOLTAGE REGULATION
- FIELD REPLACEABLE SMA RF CONNECTORS

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

Product Image



Electrical Specifications: $Z_0 = 50\Omega$, $V_{CC} = +15 V_{DC}$

Absolute Maximum Ratings

Parameter	Units	Typical			Guaranteed		
		25°C	0°C to 50°C	-40° to +70°C*	25°C	0°C to 50°C	-40° to +70°C*
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	± 1.2	± 1.7	± 2.0			
Reverse Isolation	dB	50					
Noise Figure (max)							
2.0 to 5.0 GHz	dB	4.2	4.5	5.0			
5.0 to 10.0 GHz	dB	2.7	3.2	3.5			
10-12 GHz	dB	3.2	3.5	3.7			
Power Output @ 1 dB comp. (min)	dBm	+14.2	+13.5	+13.0			
IP3	dBm	+25.0					
VSWR Input / Output (max)		1.7:1 / 1.8:1	1.9:1 / 2:0:1	2.1:1 / 2.2:1			
DC Current @ 15 Volts (max)	mA	138	144	148			

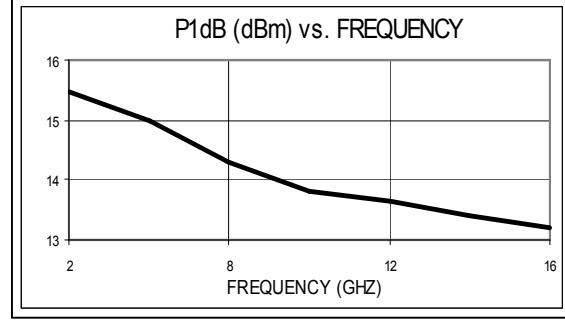
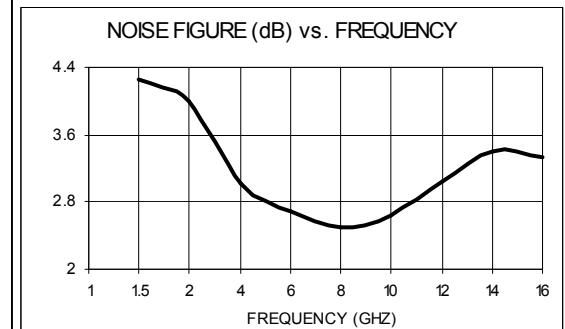
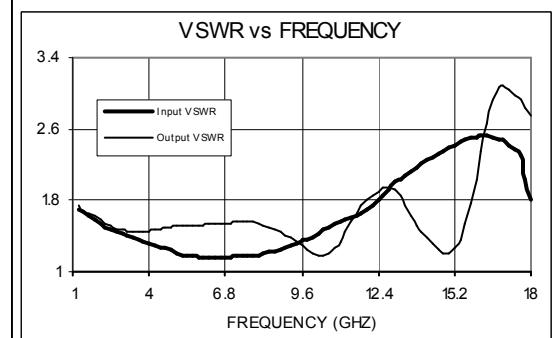
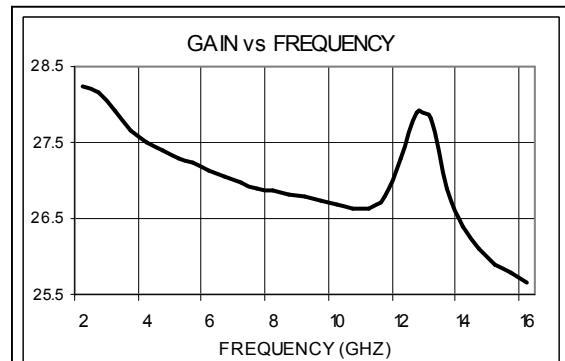
Parameter	Absolute Maximum
Storage Temperature	-62°C to +125°C
Case Temperature	+125°C
DC Voltage	+18 V
Continuous Input Power	+13 dBm
Short Term Input power (1 minute max.)	100 mW
Peak Power (3 μsec max.)	0.25 W
"S" Series Burn-In Temperature (case)	+125°C

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Typical Performance Curves at +25°



Outline Drawing: SMA Connectorized

