## 6884-700

# Microwave Amplifier 2.0 to 12.0 GHz

#### 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

#### Description

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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	

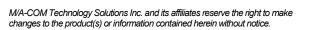
#### Electrical Specifications: $Z_0 = 50\Omega$ , $V_{CC} = +15 V_{DC}$

Parameter Units	L lucito	Typical	Guaranteed	
	Units	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	± 1.5	± 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	-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

Product Image



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Visit www.macomtech.com for additional data sheets and product information.

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Rev. V4



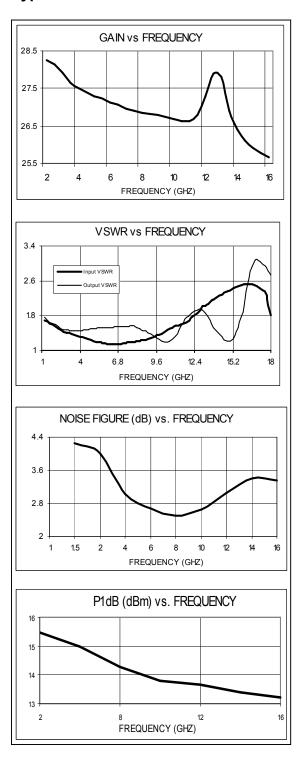


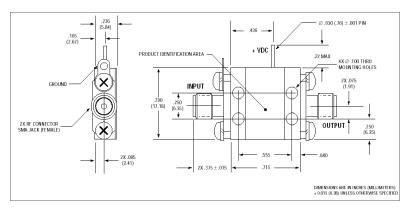
Rev. V4

#### Microwave Amplifier 2.0 to 12.0 GHz

#### Typical Performance Curves at +25°

#### **Outline Drawing: SMA Connectorized**





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