

### Applications:

- Microwave and Millimeter Transmitters
- Instrumentations
- Test Bench

### Features:

- State-of-the-art Solid State Packaging Technologies
- Various Bandwidth Coverage
- High Output Power
- Linear gain of 10 to 60 dB
- Coax or Waveguide RF connectors



### Descriptions:

**3J Microwave, Inc.** offers a complete line of power amplifier in frequency range of 2 to 100 GHz. The available state-of-the-art solid-state technology, devices, advanced power combining & packaging techniques are utilized in the power amplifier series to ensure the cutting edge performance achieved. Coax RF connectors are available in the frequency range of 67 GHz and below. Waveguide connectors are

designed to cover eight waveguide bands from K to W-Band in the frequency range of 18 to 110 GHz. The series power amplifiers are designed for the various applications such as bench test, transmitters and instrumentations etc. The power amplifiers are sorted in two categories: 1) **PAC** series coax power amplifiers; 2) **PA** series waveguide amplifiers.

### PAC Series Coax Power Amplifier Specifications:

Model Number**	Freq (GHz)	Bandwidth (GHz)	NF (dB)	Gain (dB)	Output P1dB (dBm)	DC Bias* (V/A)	RF Connector	Outline
PAC-xxxxxxxxxx-00	1-27	2 to 26	8 -12	10-40	+18 to +38	+8/0.2-15.0	SMA	A01,A02
	1-40	2 to 39			+18 to +38		2.92 mm	B01,B02
	1-50	2 to 49			+18 to +35		2.40 mm	C01,C02
	1-67	2 to 66			+15 to +30		1.85 mm	

\* The Bias Voltage and Current may vary depending on the specifications

\*\* Please see "how to order" for the model number details

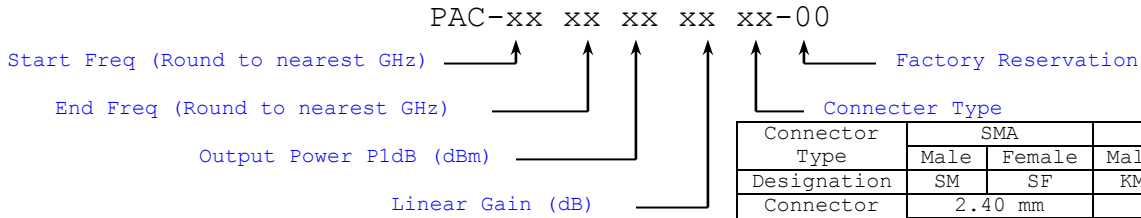


# Section 1-2: Power Amplifier Series

[www.3jmicrowave.com](http://www.3jmicrowave.com)

Frequency Coverage: 2 to 100 GHz

## How to Order:



Connector Type	SMA		2.92 mm	
	Male	Female	Male	Female
Designation	SM	SF	KM	KF
Connector Type	2.40 mm		1.85 mm	
Designation	2M	2F	VM	VF

## PAC Model Number Example:

Model Number of a P1dB 30 dBm and linear Gain 25 dB Coax Power Amplifier with SMA Female Connectors at 1 to 27 GHz:

**PAC-01273025SF-00**

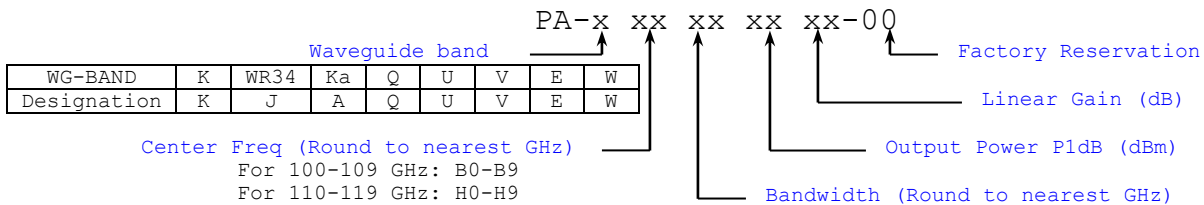
## PA Series Waveguide Power Amplifier Specifications:

Model Number**	Freq (GHz)	Bandwidth (GHz)	NF (dB)	Gain (dB)	Output P1dB (dBm)	DC Bias* (V/A)	RF Connector	Outline
PA-xxxxxxxx-00	18-27	2 to 9	8-12	10-40	+18 to +38	+12/0.2-15	UG595-U	A01,A02
	22-33	2 to 11			+18 to +38		UG595-UM	B01,B02
	26-40	2 to 14			+18 to +38		UG599-U	C01,C02
	33-50	3 to 17			+18 to +35		UG383-U	
	40-60	3 to 20			+15 to +33		UG383-UM	
	50-75	5 to 25			+15 to +30		UG385-U	A01,A02
	60-90	5 to 30			+10 to +28		UG387-U	B01,C01
	75-110	5 to 35			+10 to +28		UG387-UM	

\* The Bias Voltage and Current may vary depending on the specifications

\*\* Please see "how to order" for the model number details

## How to Order:



WG-BAND	K	WR34	Ka	Q	U	V	E	W
Designation	K	J	A	Q	U	V	E	W

Center Freq (Round to nearest GHz)

For 100-109 GHz: B0-B9

For 110-119 GHz: H0-H9

## PA Model Number Example:

Model Number of a Q-Band P1dB 33dBm Waveguide Power Amplifier with linear gain of 30dB at 40 ± 2 GHz:

**PA-Q40043330-00**