



Power Amplifier

Model: PA-18G-26G5-1.6

18-26.5GHz 1.6W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 18-26.5GHz
- High output power at saturation, 1.6W Typ.
- High gain, 18 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-18G-26G5-1.6 is a power amplifier with a typical small signal gain of 18 dB and a nominal P_{sat} of 1.6W across the frequency range of 18 to 26.5GHz. The DC power requirement for the amplifier is +12 VDC/860 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	18		26.5	GHz
Small Signal Gain		18		dB
Small Signal Gain Flatness		±2	±2.5	dB
Output P1dB	30	31		dBm
Output Psat		32		dBm
Input VSWR		2	2.2	:1
Output VSWR		2	2.2	:1
DC Voltage		+12		V DC
DC Supply Current		860		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	200	g

*Note: For a wider temperature range, please consult the manufacturer.

Absolute Maximum Ratings:

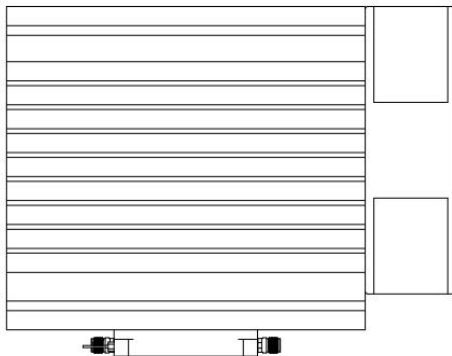
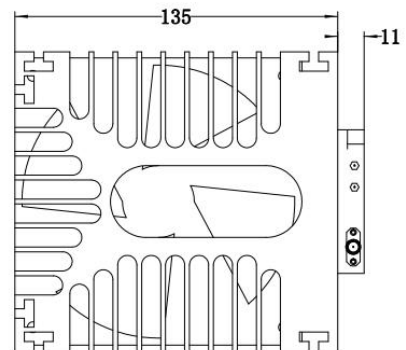
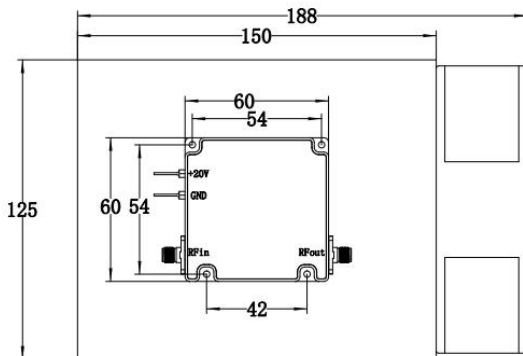
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-18G-26G5-1.6



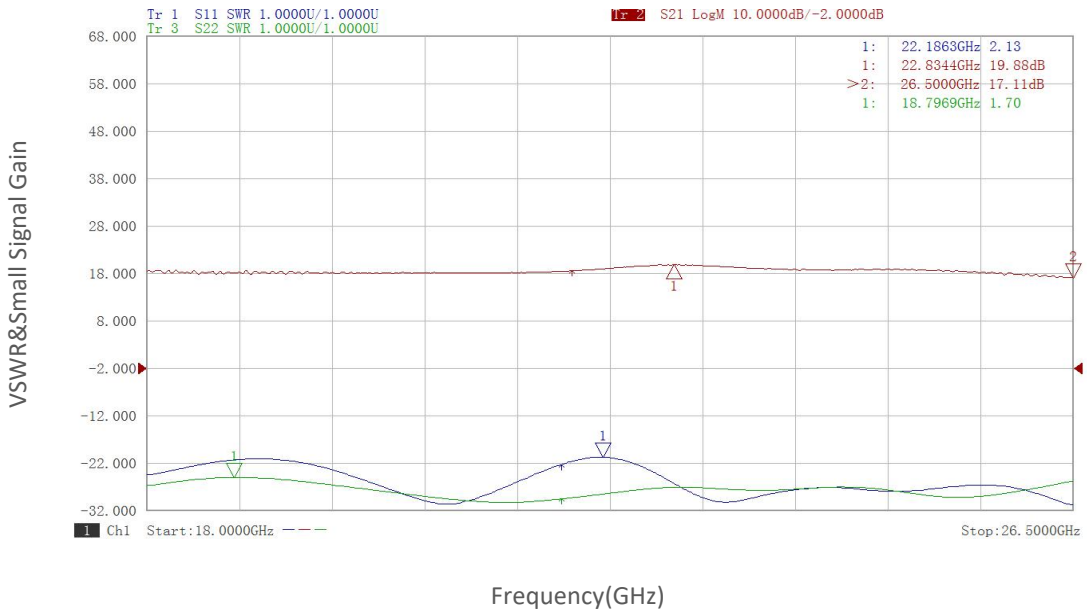
Ordering Information:

Base Number	Description	Optional
PA-18G-26G5-1.6	Power Amplifier, 18-26.5GHz, Gain:18dB,Psat:1.6W,+12V DC	Without Heatsink
PA-18G-26G5-1.6-HS	Power Amplifier, 18-26.5GHz, Gain:18dB,Psat:1.6W,+12V DC	With Heatsink

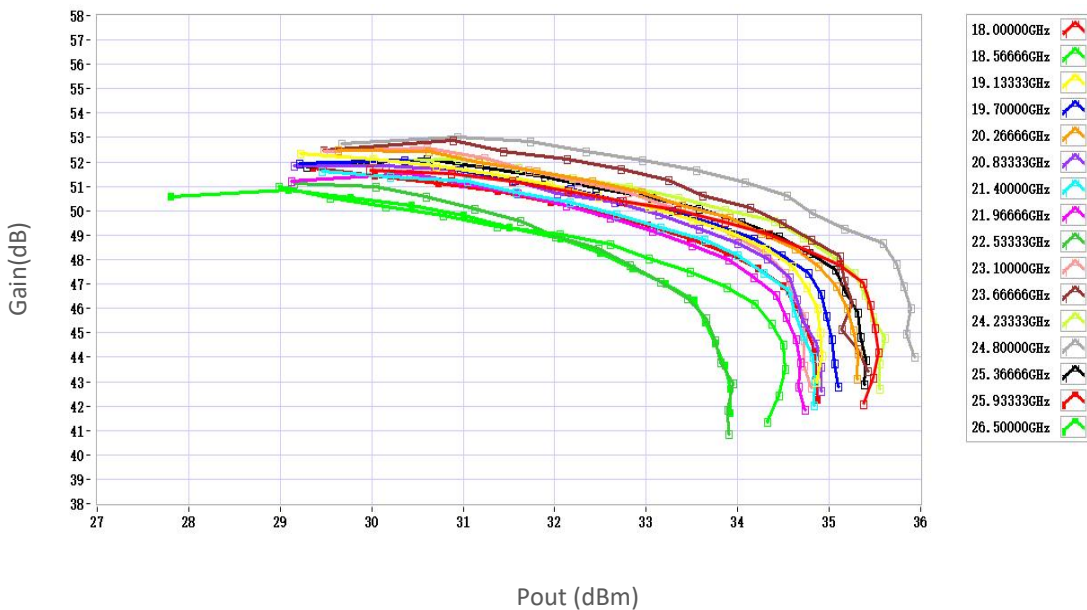


Typical Performance Data:

VSWR&Small Signal Gain vs Frequency



Gain vs Output Power



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

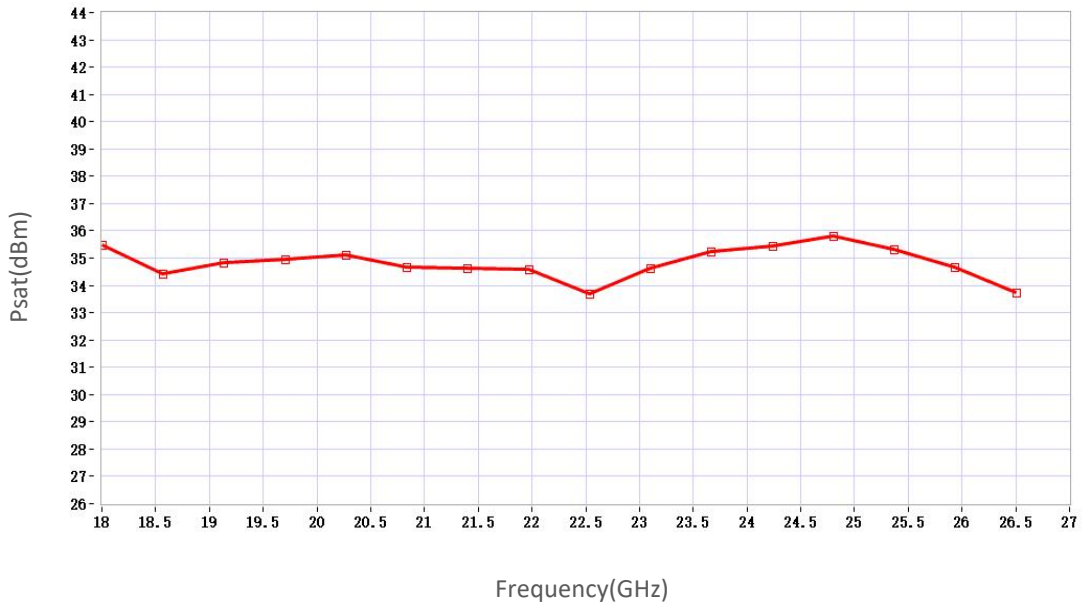


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Typical Performance Data:

Psat vs Frequency



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