



WR42 Low Noise Amplifier 18GHz ~ 26.5GHz

Features

- Gain: 46dB Typical
- Noise Figure: 2.2dB Typical
- P1dB Output Power: +20dB m Typical
- Convenient AC Power Input.



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	18		22	22		26.5	GHz
Gain	40	46	48	40	46	48	dB
Gain Flatness		±0.5	±1.0		±2.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±2.0			±2.5		dB
Noise Figure		2.2	2.8		2.2	2.8	dB
Input VSWR		1.5	2.0		1.5	2.0	: 1
Output VSWR		2.0			2.0		: 1
Output Power for 1 dB Compression (P1dB)	16	20		15	18		dBm
Saturated Output Power (Psat)		23			23		dBm
Output Third Order Intercept (OIP3)		24			24		dBm
Isolation S12		-60			-55		dB
Supply Current (AC110/220V)		35/18			35/18		mA

Weight	41.27ounces	Impedance	50ohms
Input / Output Connectors	WR42	Material	Aluminum
Finish	Gray Plated	Package Sealing	Epoxy Sealed(Standard)

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

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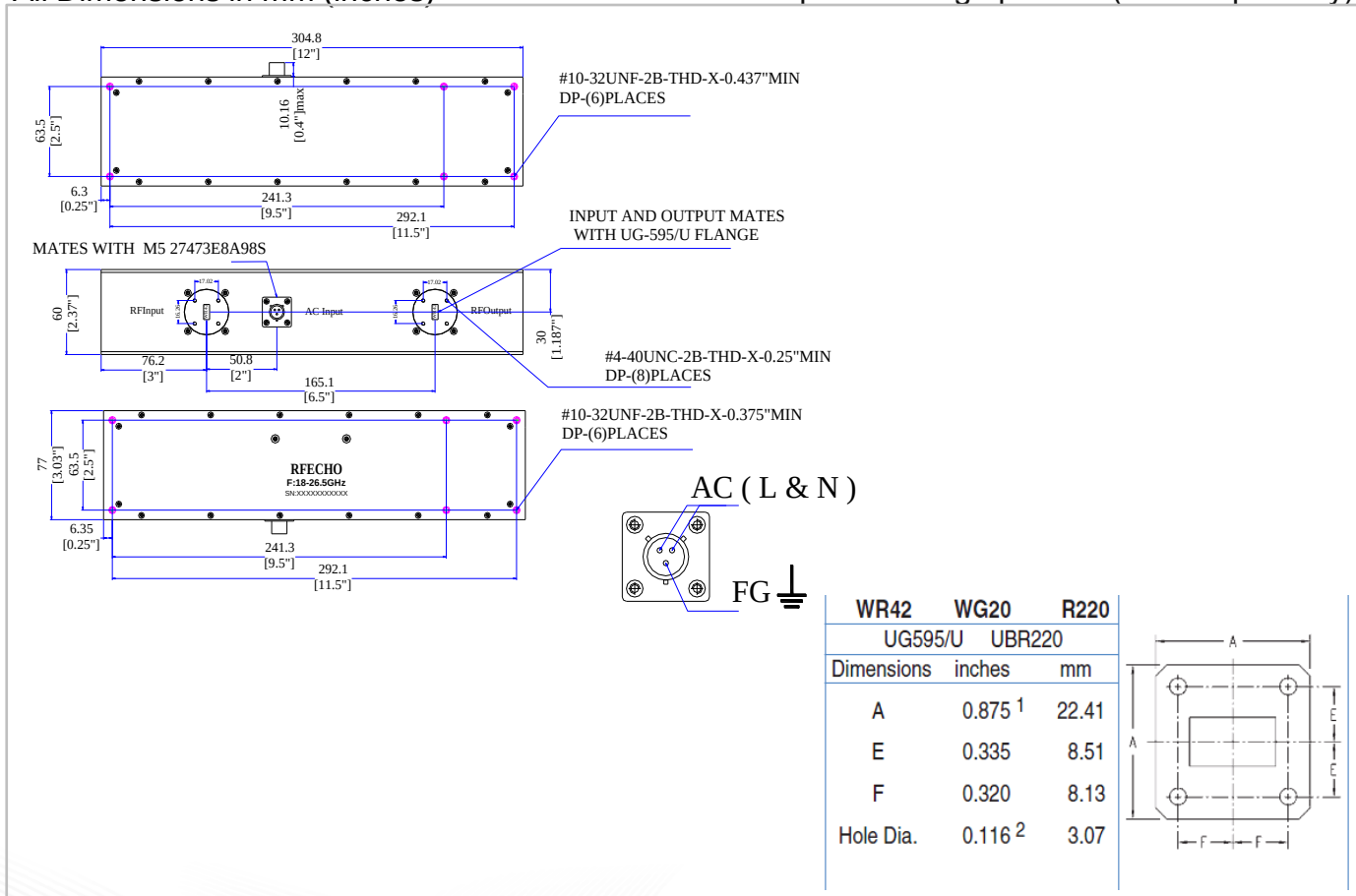
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
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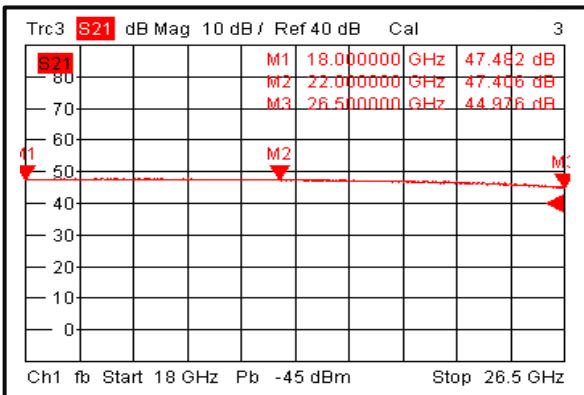
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

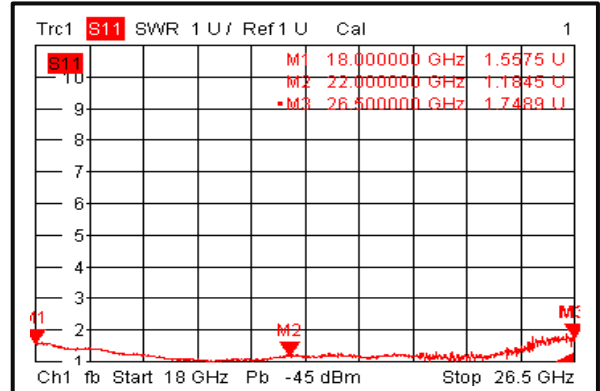




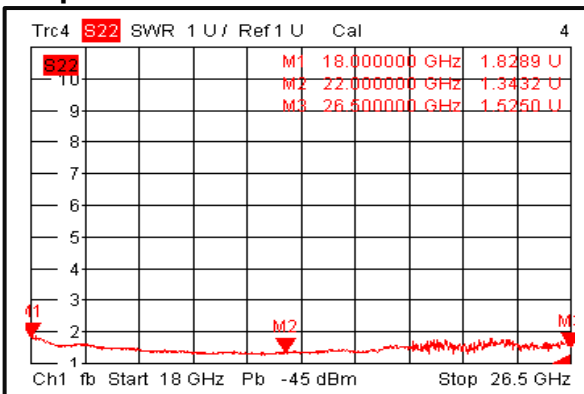
Gain



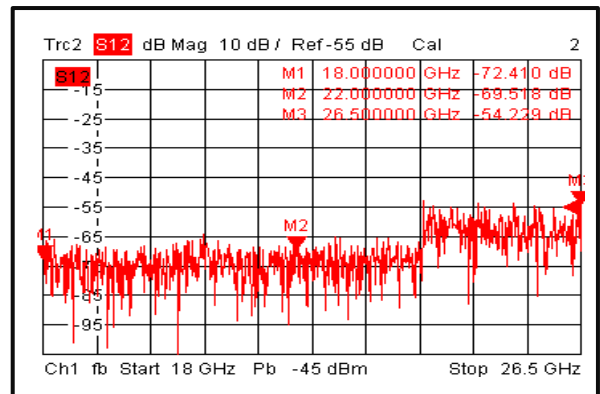
Input VSWR



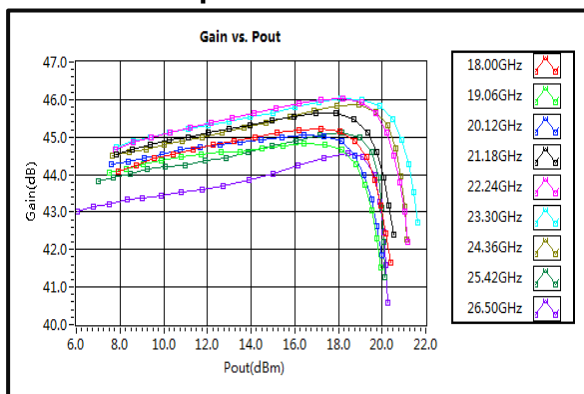
Output VSWR



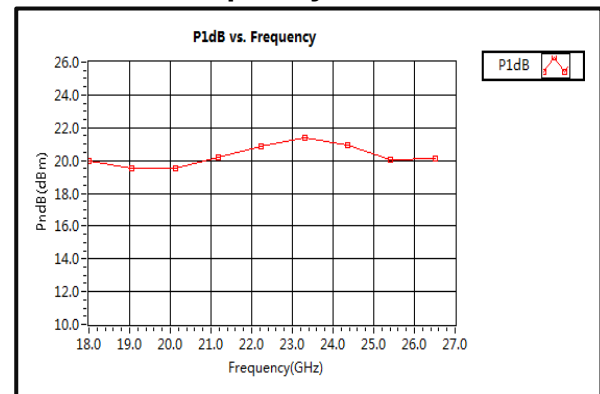
Isolation



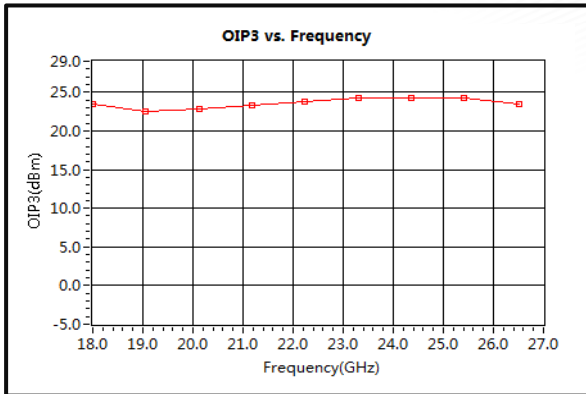
Gain vs. Output Power



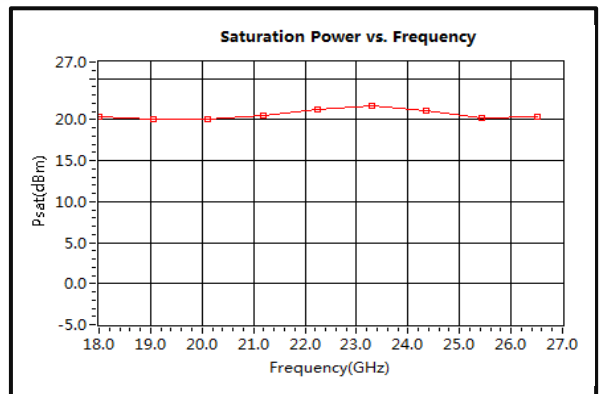
P1dB vs. Frequency



Output Third Order Intercept (OIP3)



Saturation Power vs. Frequency



Noise Figure



2nd Harmonic Wave Output Power

