

Solid State High Power Amplifier Systems

75-110GHz/37dB Gain/37dBm Psat/220V AC

Model: TLPA75G110G-37-37-BC

TLPA75G110G-37-37-BC is a solid state high power amplifier systems provides high output power and high gain across the 75 to 110 GHz frequency range. The amplifier features a built-in 220V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Frequency range: 75-110GHz
- Gain: 37dB Min
- Psat Output Power:37dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output



Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	75		110	GHz
Small Signal Gain	SSGP	37			dB
Output Psat	Psat	37			dBm
Spurious	Spur		-55	-40	dBc
Harmonics	HAM			-30	dBc
Input VSWR	VSWRin		2.5		:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			400	W

Mechanical Specifications:

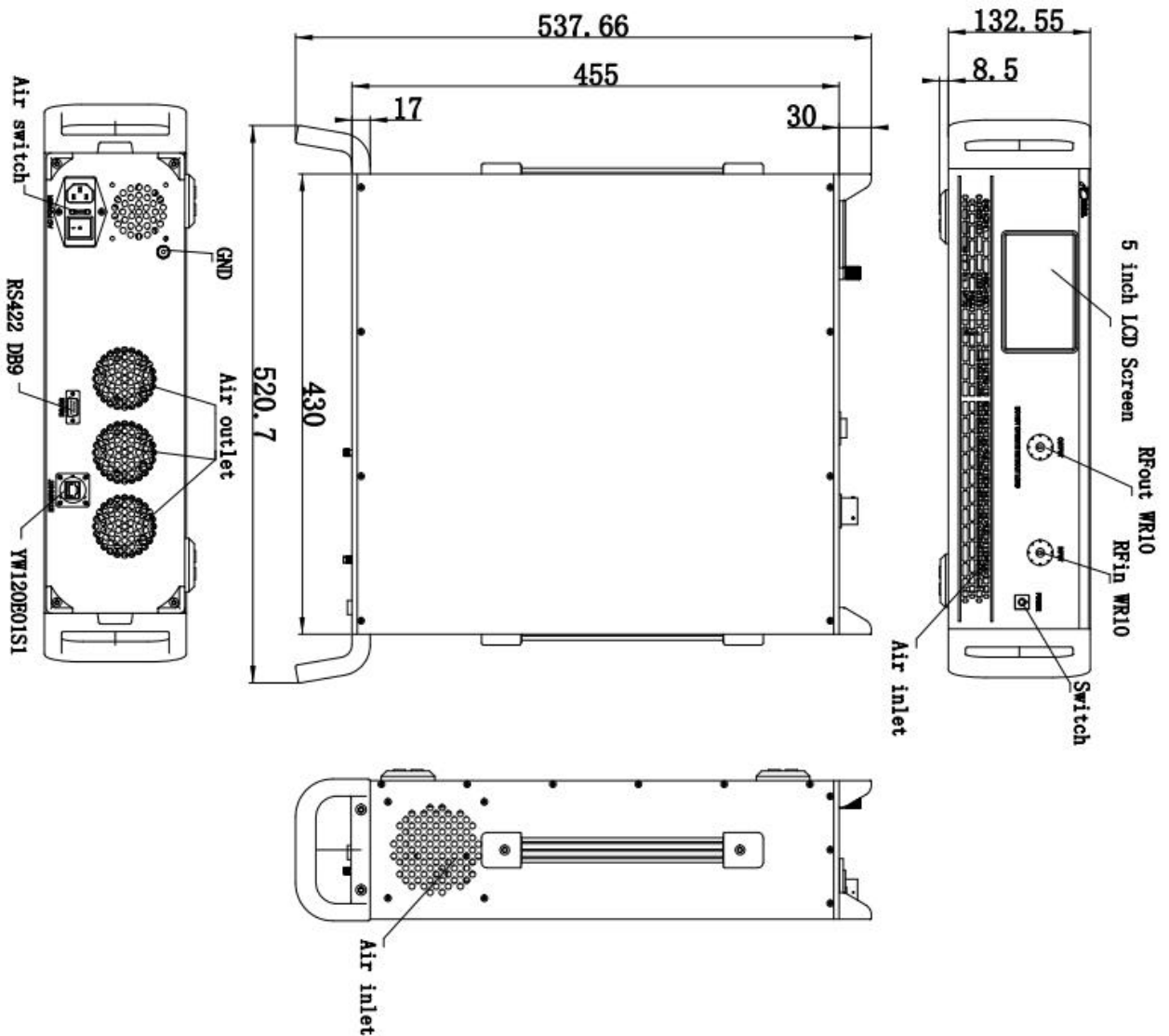
Parameter	Value	Units
Input Connector	WR10/UG-387/U	
Output Connector	WR10/UG-387/U	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	5 inch LCD Screen Display	
Size	19 Inch 3U	mm
Weight	≤30	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2, ALC automatic level control
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Over VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
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			

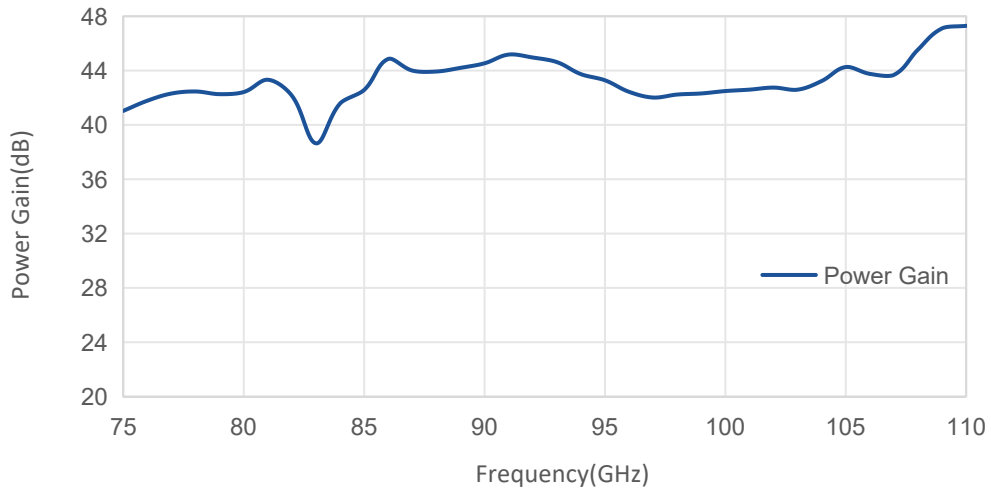
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

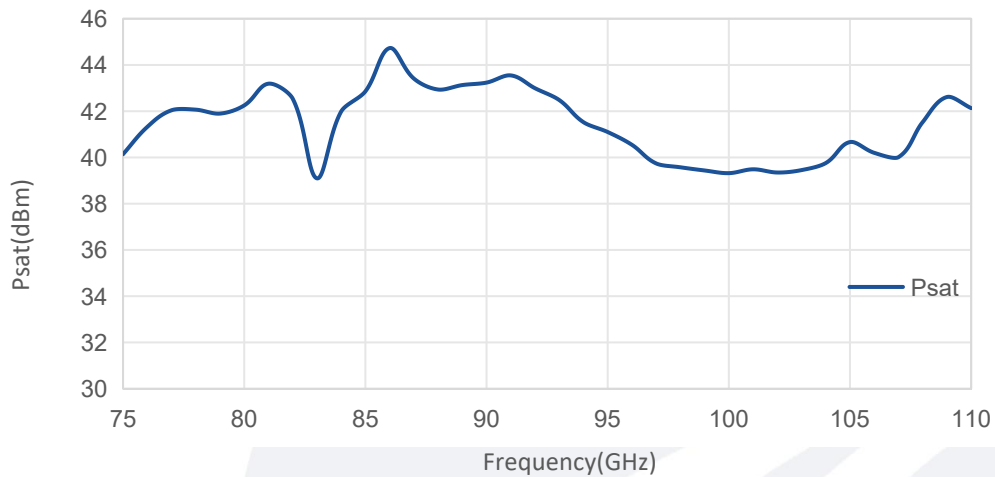
Base Number	Description	Revision
TLPA75G110G-37-37-BC	Solid State High Power Amplifier Systems 75-110GHz, Gain:37dB, Psat:37 dBm, 220V AC, Built in Fan Cooling	Rev.1.1

Typical Performance Data:

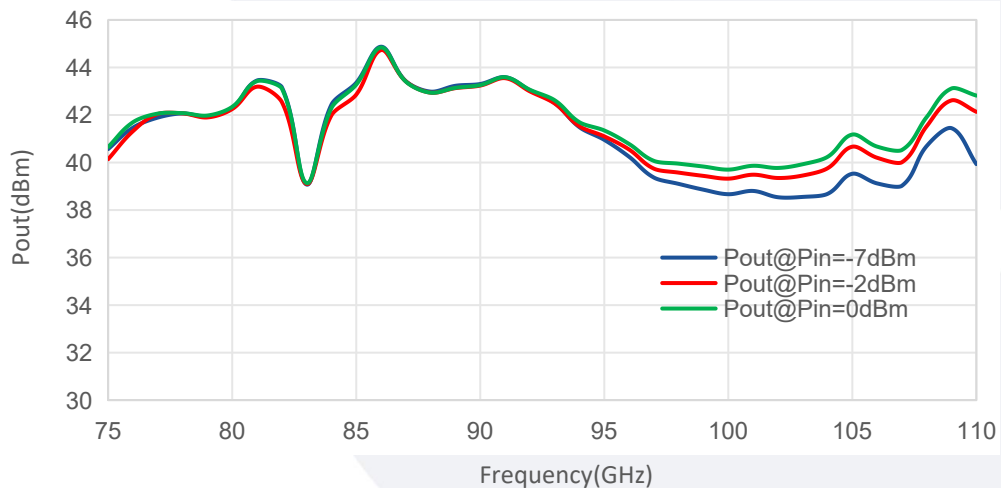
Power Gain vs Frequency



Psat vs Frequency

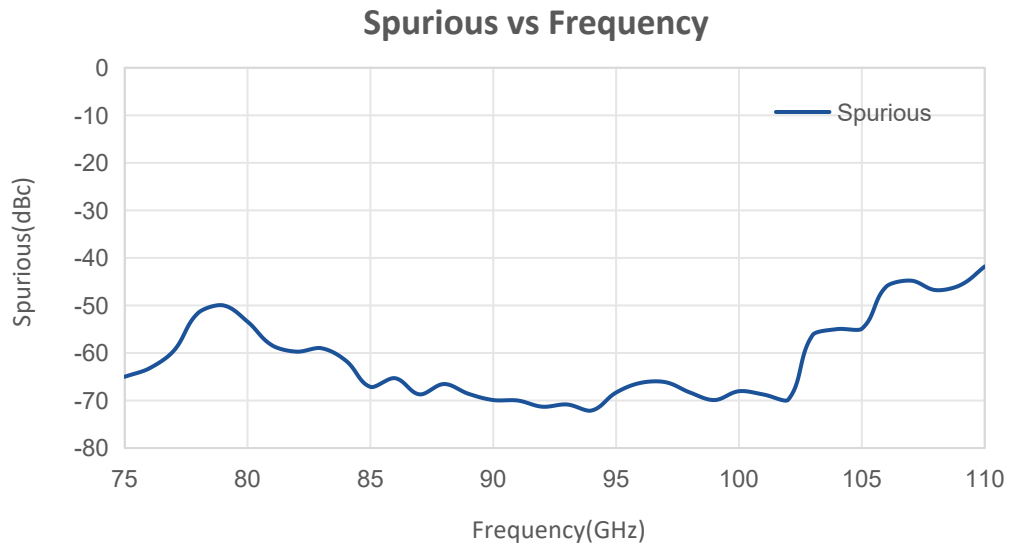


Pout@Equal_Pin



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

Typical Performance Data:



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