

Power Amplifier

14-15GHz/48dB Gain/48dBm Psat

Model: TLPA14G15G-48-48

TLPA14G15G-48-48 is a power amplifier with a minimum gain of 48 dB and a minimum Psat of 48 dBm across the frequency range of 14 to 15 GHz. The DC power requirement for the amplifier is +28 VDC/400 W. The input port configuration offers coax adapter structure with SMA female and output port is WR-62.

Features:

- Frequency range: 14-15GHz
- Gain: 48dB Min
- Output Power Psat: 48dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	14		15	GHz
增益 Gain	48			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	48			dBm
杂散 Supurious@Pout=48dBm			-60	dBc
谐波 Harmonic			-20	dBc
三阶互调 3rd Order IMD	25			dBc
输入驻波 Input VSWR			1.5	:1
直流电压 DC Voltage		+28		V DC
功耗 Power Consumption			400	W
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/WR-62	
尺寸 Size	140*235*100	mm
重量 Weight	≤3.5	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

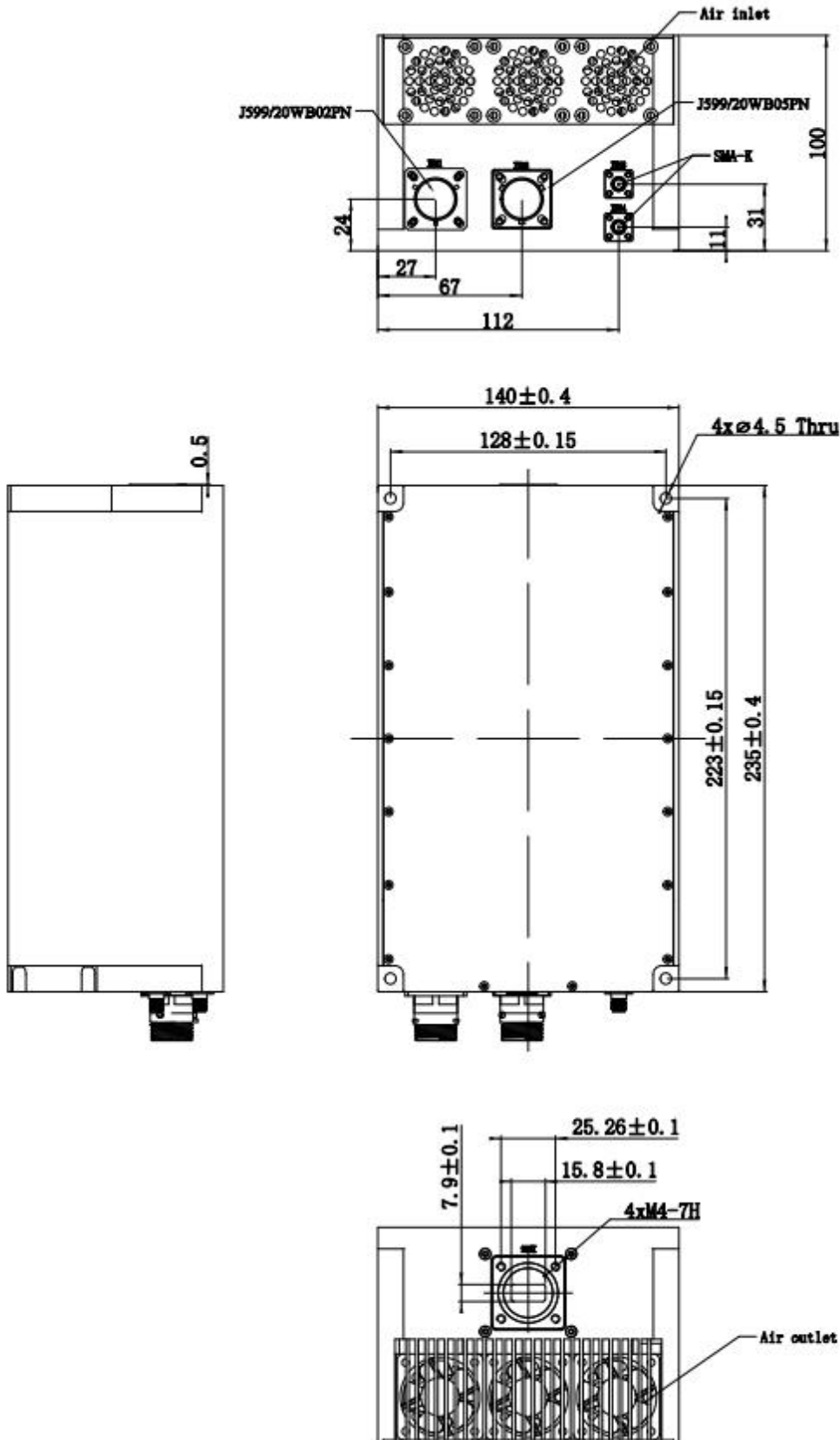


接口说明 Instruction Connector:

接口 Port	功能 Function
Port 1	1,RF Input 2,IF/REF Input
Port 2	RF Output
Port 3	Supply Voltage
Port 4	Communication
Port 5	Output Power Forward Coupling

外形图 Outline Drawing:

Unit:mm



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA14G15G-48-48	Power amplifier 14-15GHz, Gain:48dB,Psat:48dBm,+28V DC,With Heatsink	Rev.1.1