



Power Amplifier

Model: PA-30M-2G5-10

30MHz-2.5GHz 10W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 30MHz-2.5GHz
- High output power at saturation, 10W Typ.
- High gain, 43 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-30M-2G5-10 is a power amplifier with a typical small signal gain of 43 dB and a nominal P_{sat} of 10W across the frequency range of 30 MHz to 2.5 GHz. The DC power requirement for the amplifier is +28 VDC/1.5 A. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	0.03		2.5	GHz
Small Signal Gain	40	43		dB
Small Signal Gain Flatness		±1.5	±2	dB
Output Psat	36	40		dBm
Spurious			-50	dBc
Harmonics			-10	dBc
Input VSWR		1.5	2	:1
Switching Speed		1	2	us
TTL Control	"1": On, "0": Off, Enable: 5V, Disable: 0V			V
DC Voltage		+28		V DC
DC Supply Current		1.5		A
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	SMA Female/SMA Female	
DC Bias	DSUB-7W2	
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	95.3*44.5*26.9	mm

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



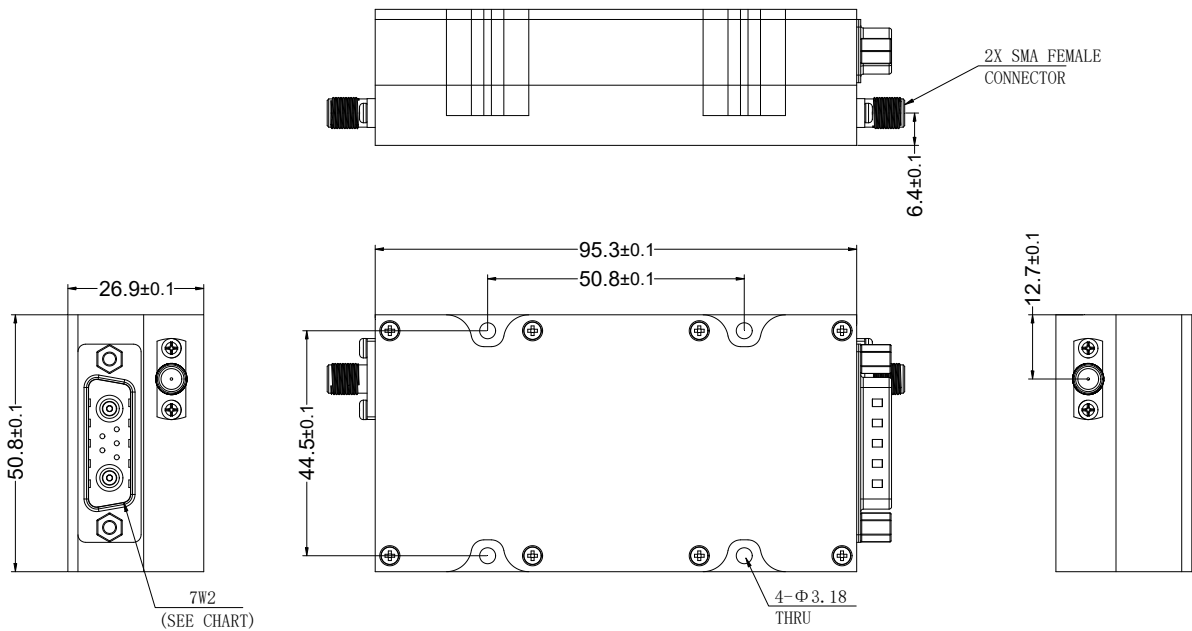
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-30M-2G5-10



DC Supply Connector(DSUB-7W2):

Pin	Name	Function
A1	GND	Ground
A2	+VDC	+26-30VDC
1	Temp Sensor	$V_0 = 10 \text{ mV}/^\circ\text{C} \times T^\circ\text{C} + 600 \text{ mV}$
2	Amp enable	TTL high (+5V) or no connection=enable TTL Low (0V)=disable



DC Supply Connector(DSUB-7W2):

Pin	Name	Function
3	NC	No connection
4	GND	Ground
5	NC	No connection

Ordering Information:

Base Number	Description	Optional
PA-30M-2G5-10	Power Amplifier, 30MHz-2.5GHz, Gain:43dB,Psat:10W,+28V DC	Without Heatsink
PA-30M-2G5-10-HS	Power Amplifier, 30MHz-2.5GHz, Gain:43dB,Psat:10W,+28V DC	With Heatsink