

## Power Amplifier

2700-3200MHz/30dB Gain/44dBm Psat

Model: TLPA2700M3200M-30-44

TLPA2700M3200M-30-44 is a power amplifier with a minimum small signal gain of 30 dB and a minimum Psat of 44 dBm across the frequency range of 2700 to 3200MHz. The DC power requirement for the amplifier is +28 VDC/3 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 2700-3200MHz
- Gain: 30dB Min
- Output Power Psat: 44dBm Min
- Good Power and Gain Flatness
- 44 Ohm Matched Input / Output

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	2700		3200	MHz
Small Signal Gain	30	33		dB
Gain Flatness		±1	±1.5	dB
Output Psat	44	45		dBm
Input VSWR		1.3	1.5	:1
Output VSWR			2	:1
DC Voltage		+28	+30	V DC
DC Supply Current		3	4.2	A
Impedance		50		Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	J30J-9ZKP	
Size	170*94*20	mm
Weight	300	g

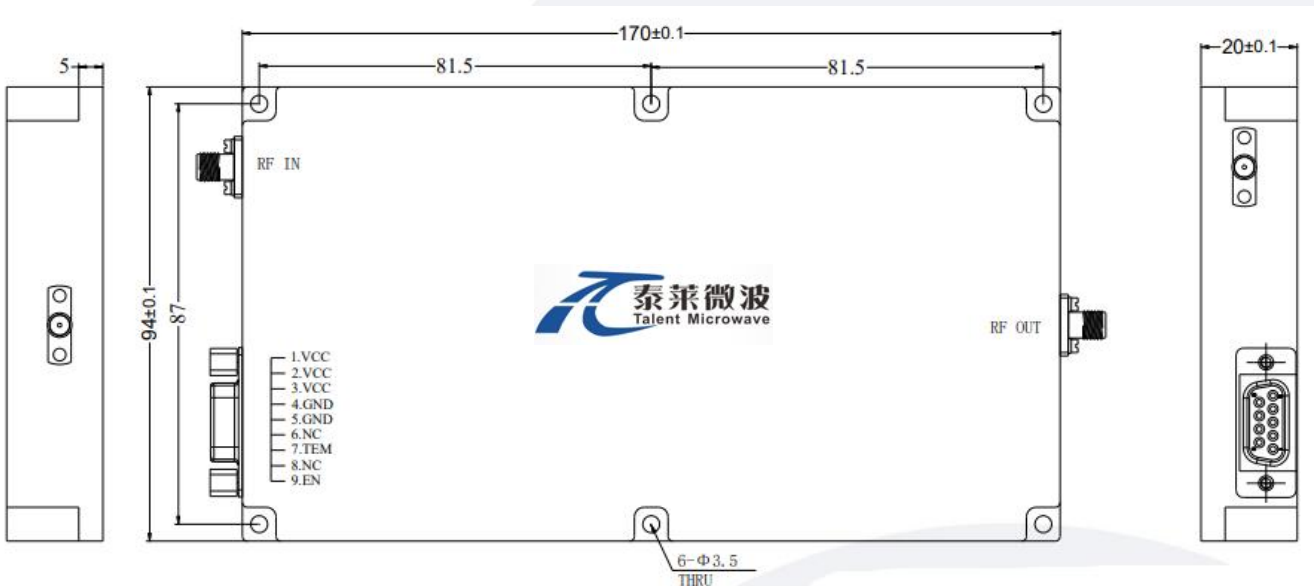
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+20 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



### Outline Drawing:

Unit:mm



**\*\*\*Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

### Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

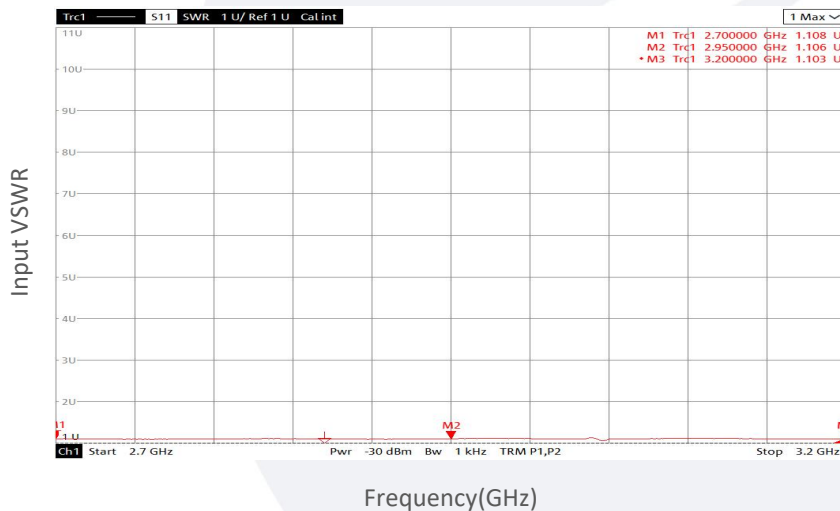
\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

Base Number	Description	Revision
TLPA2700M3200M-30-44	Power amplifier 2.7-3.2GHz, Gain:30dB,Psat:44dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA2700M3200M-30-44-HS	Power amplifier 2.7-3.2GHz, Gain:30dB,Psat:44dBm,+28V DC,With Heatsink	Rev.1.1

### Typical Performance Data:

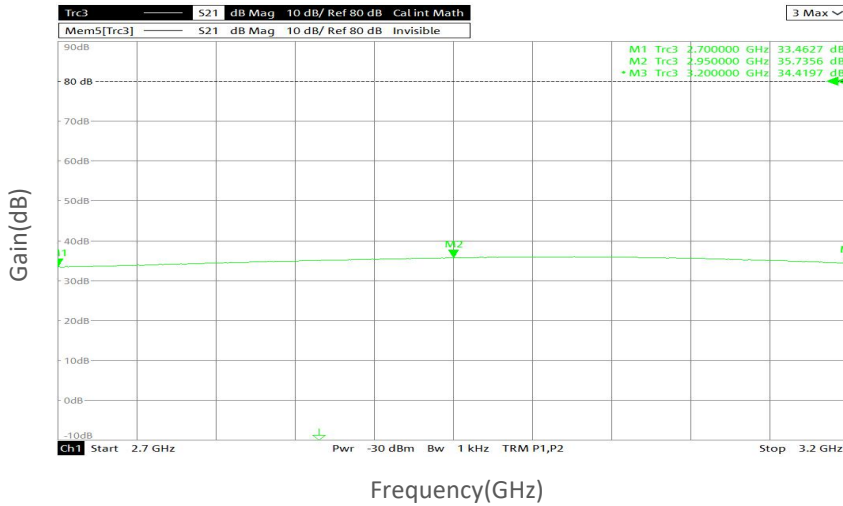
Input VSWR vs Frequency



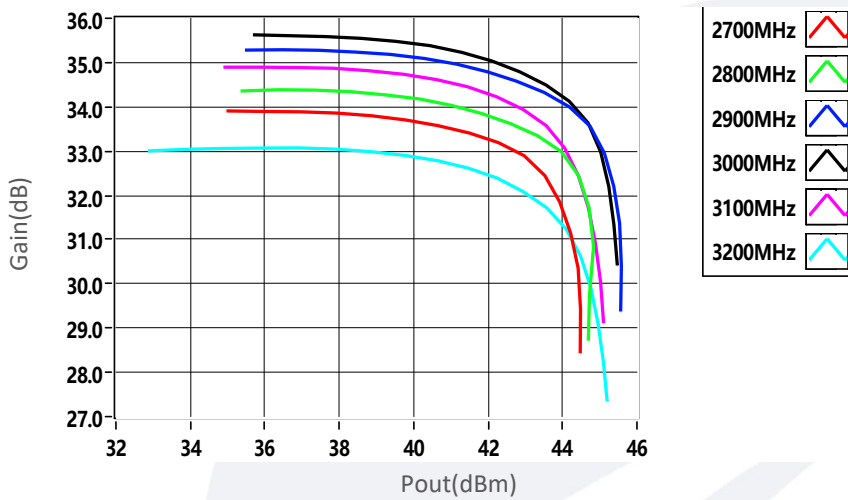
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

## 典型曲线 Typical Performance Data:

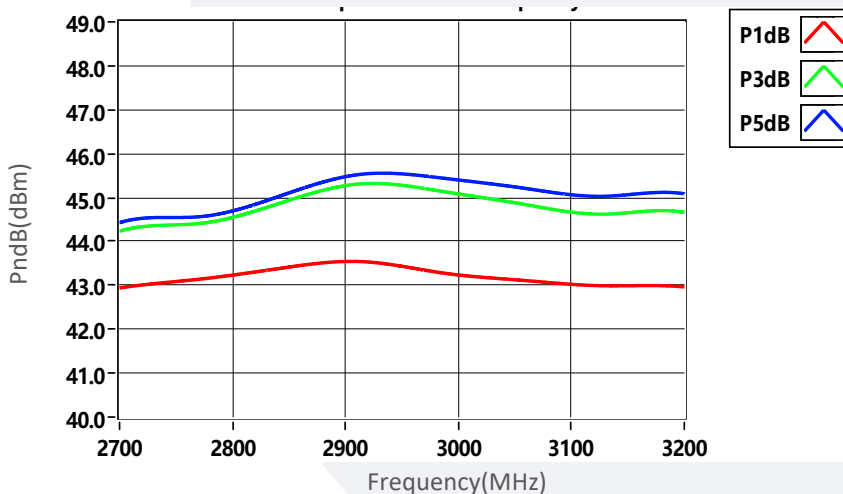
### Small Signal Gain vs Frequency



### Small Signal Gain vs Output Power



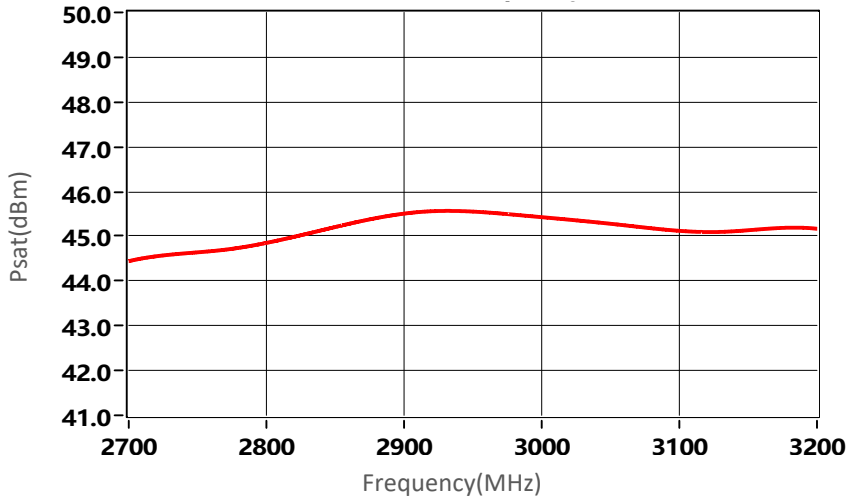
### PndB vs Frequency



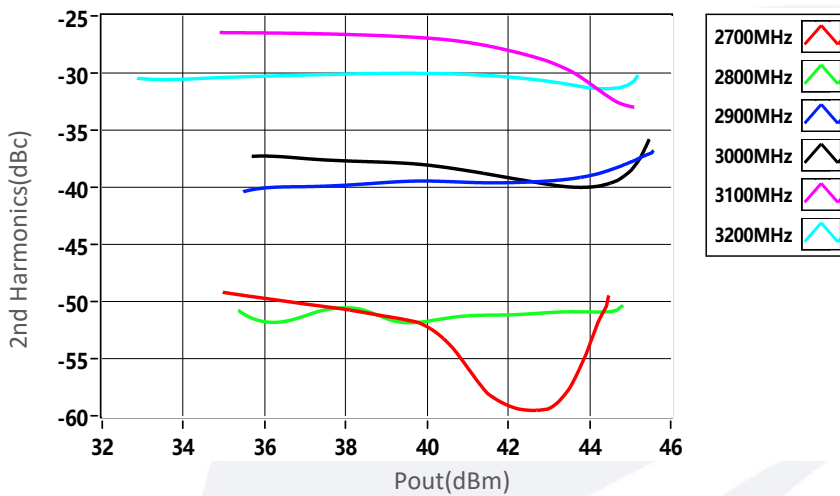
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

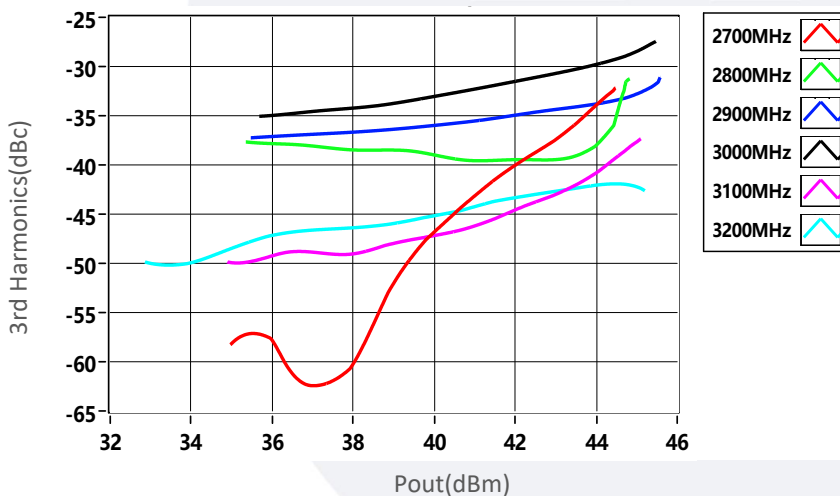
Psat vs Frequency



2nd Harmonics vs Output Power

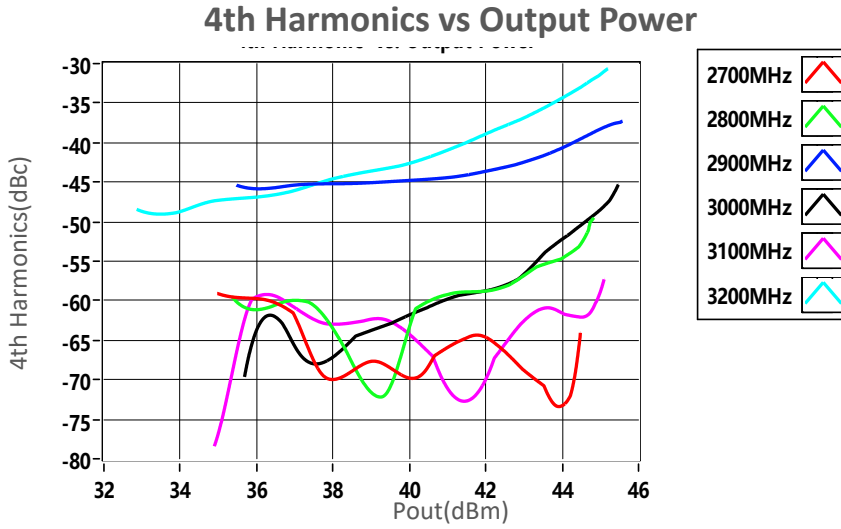


3rd Harmonics vs Output Power



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典型曲线 Typical Performance Data:



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