

Power Amplifier

0.4-2.5GHz/50dB Gain/50dBm Psat

Model: TLPA0.4G2.5G-50-50

TLPA0.4G2.5G-50-50 is a power amplifier with a minimum gain of 50 dB and a nominal Psat of 50 dBm across the frequency range of 0.4 to 2.5 GHz. The DC power requirement for the amplifier is +28 VDC/12 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.4-2.5GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.4		2.5	GHz
Gain	50	52		dB
Gain Flatness		±1.8	±2.5	dB
Output Psat		100		W
Noise Figure			10	dB
Spurious			-60	dBc
Harmonics@Pout=100W		-20		dBc
Input VSWR		1.5	2.0	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		12	15	A
Impedance		50		Ohms

DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1	+28V	Power supply positive,+26.0-30.0VDC
2	NC	Not connected
3	NC	Not connected
4	GND	Power supply negative
5	EN	Amplifier Enable: The amplifier is turned on at high level (or floating) and off when shorted to ground.
6	+28V	Power supply positive,+26.0-30.0VDC
7	+28V	Power supply positive,+26.0-30.0VDC
8	GND	Power supply negative
9	GND	Power supply negative

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
TLPA0.4G2.5G-50-50	Power amplifier 0.4-2.5GHz, Gain:50dB,Psat:50dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA0.4G2.5G-50-50-HS	Power amplifier 0.4-2.5GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.1