

# 100 -500 MHz 100W Power Amplifier Module Technical

## Specification Model :

### PA 100 500 M100-A

#### Electrical performance indicators:

serial number	index	parameter	Remark
1	Operating frequency range	100 ~ 500MHz _	
2	Output Power	$\geq 100\text{W}$ (50dBm)	continuous wave
3	gain	$> 20\text{dB}$	
4	In-band gain flatness	$\leq 3\text{dB}$	
5	Input/Output VSWR	$< 2.0$ _	
6	Working current	$\leq 10\text{A}$	Supply voltage +28V
7	Forward power detection	$0 \sim 3\text{V}@ 31\text{mV/dB}$	
8	Standing wave alarm protection	If the standing wave ratio is greater than 3.5, the power amplifier is turned off and an alarm	
9	temperature check	$500\text{mV} + T(^{\circ}\text{C}) * 10\text{mV}/^{\circ}\text{C}$	
10	Over temperature protection	When the temperature is greater than $85^{\circ}\text{C}$ , the power amplifier will be turned off and an alarm will be issued, and the power amplifier will be automatically	

		turned on at 65° C.	
11	Operating temperature	-40~+65C	
12	Supply voltage	+ 28V ± 1V	

1. RF interface:

RF input interface: SMA-F

RF output interface: SMA-F

2. Power interface:

Power interface model: JL2 3 - 10ZJW, the pin definitions are as follows:

pin number	pin definition	direction	describe
1	GND		power ground
2	GND		power ground
3	GND		power ground
4	GND		power ground
5	GND		power ground
6	+28V		Power amplifier +28V power supply (10A)
7	+28V		
8	+28V		
9	+28V		
10	+ 5.5V		DC power supply ( 300mA )

3. Control interface:

Control interface model: JL2 4 - 20ZJW, the pin definitions are as follows:

pin number	pin definition	direction	describe
1			reserved pins
2	TR		High hair and low income
3	VSWR_ALM	OUT	Standing wave alarm, active high
4	PF	OUT	Power amplifier terminal forward power detection voltage (0-3V)
5	VT	OUT	$V_t=500mV+T ( ^\circ C ) *10mV/ ^\circ C$ ,
6	Re1		reserved pins
7	GND		
8	GND		
9	GND		
10	GND		
11	Re2		reserved pins
12	Re3		reserved pins

13	Re4		reserved pins
14	Re5		reserved pins
15	Re6		reserved pins
16	Re8		reserved pins
17	GND		
18	GND		
19	GND		
20	GND		