

REV	DESCRIPTION OF REVISION	By	DATE	APPROVED
A	INITIAL RELEASE	C. Cai	2023/6/20	C. Chen

TECHNICAL DATA

► Electrical Data(50Ω, 25℃)

Frequency Range	225~512MHz
Output Power(CW)	55dBm min, 56dBm typ
Gain	55dB min, 58dB typ
Gain Flatness	±2.0dB typ
Input VSWR	1.5:1 typ
Max Input Power	+5dBm
Harmonic	-15dBc typ, -10dBc max
IMD3, 2-Tone(48dBm/Tone)	-30dBc typ, -20dBc max(1MHz Spacing)
Spurious	-60dBc max
Isolation	-50dB typ
Operating Voltage	+46V~+50V
Operating Current(VCC=48V)	2.5A typ, 22A max

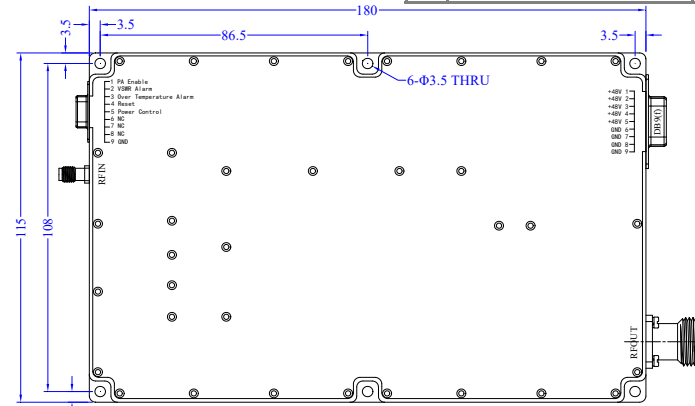
► Mechanical Data

Dimensions	180×115×25mm
RF Connectors IN/OUT	SMA-Female/N-Female
DC Power/Interface Connector	9-Pin D-Sub
Control Interface Connector	J30J-9ZKW-J

► Environmental Data

Operating Temperature	-30℃~+60℃
Storage Temperature	-50℃~+105℃

! Stress above these ratings may cause permanent damage to the device
Radiator/Heatsink required during operation or test(optional)



Control Interface Connector, J30J-9ZKW-J, 9-Pin, Female

Pin	Name	Function	Specifications
1	PA-Enable	Input	Amplifier Enable: TTL High(5V) (Internally Pulled-High)
2	VSWR Alarm	Output	Pin will be latched to logic HIGH, and PA Turn Off when output reflection/VSWR is more than 5.
3	Over Temp Alarm	Output	When the temperature of the case exceeds 70℃, PA will turn off and this pin will be pulled high. If the temperature of case drops to 60℃, PA will turn to normal operation, and this pin will be pulled low.
4	Reset	Input	When PA triggers the VSWR protection, PA will shut down and enter the state lock. Giving this pin a 10us low pulse will restart. Only the VSWR protection can be reset.
5	Power Control	Input	Input Voltage 0-7V, Attenuation 30dB-0dB Input Voltage 2-7V, Attenuation 10dB-0dB
6	NC	-	No Internal Connection
7	NC	-	No Internal Connection
8	NC	-	No Internal Connection
9	GND	Input	Ground

DC Power Connector, 9-Pin D-Sub, Female

Pin	Name	Function	Specifications
1	+48V	Input	+46~+50VDC
2	+48V	Input	+46~+50VDC
3	+48V	Input	+46~+50VDC
4	+48V	Input	+46~+50VDC
5	+48V	Input	+46~+50VDC
6	GND	Input	Ground
7	GND	Input	Ground
8	GND	Input	Ground
9	GND	Input	Ground

DRAWN: L. Ma 20/06/23
ENGINEER: J. Zhu 20/06/23
APPROVED: C. Chen 20/06/23
TOLERANCE UNLESS OTHERWISE SPECIFIED

x	±0.50	[0.019"]
.x	±0.20	[0.008"]
.xx	±0.10	[0.004"]
ANGLES	±1°	

TITLE:
Power Amplifier, 225-512MHz, Gain 58dB, Output Power 56dBm, +48V, SMA/N-Female

PART No.:
TMPA-00220051-5856



www.titan-microwave.com



DIMENSIONS IN MILLIMETERS(mm)

SIZE: A4	SCALE:	SHEET: 1/1	REV: A
-------------	--------	---------------	-----------

Notes:

- ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
- CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY