MODEL MM00210P49A
20～1000MHz
80 WATTS
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :20～1000MHz
- Power Gain:49dB Typical
- Psat:80W Typical
- Supply Voltage:+28V
- 50 Ohms Input and Output Matched

ELECTRICAL SPECIFICATIONS @ +28VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	20		1000	MHz
RF Output Power @Pin=0dBm	P_{SAT}	60	80		Watt
Power Gain	G_p		49		dB
Power Gain Flatness	ΔG_p		±2		dB
Input Return Loss	S_{11}			-10	dB
Harmonics @50W	H		-10		dBc
Spurious Signals	Spur		-55		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V_{DC}	24	28	32	Volt
DC Current @80W	I_{DD}		11	12.5	Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	150x90x25[5.91x3.54x0.98]	mm [inch]	Maximum
Weight	1.2 [2.65]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-Pin, Male		
Cooling	External Heatsink Required(Not Supplied)		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		60	℃	
Non-operating Temperature	-45		85	℃	Storage
Relative Humidity (non-condensing)			95	%	

ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ P_{OUT} =30W	∞ @ all load phase & amplitude for duration of 1 minute； 3:1 @ all load phase & amplitude continuous.
Thermal Overload	85°C ±5°C shutdown

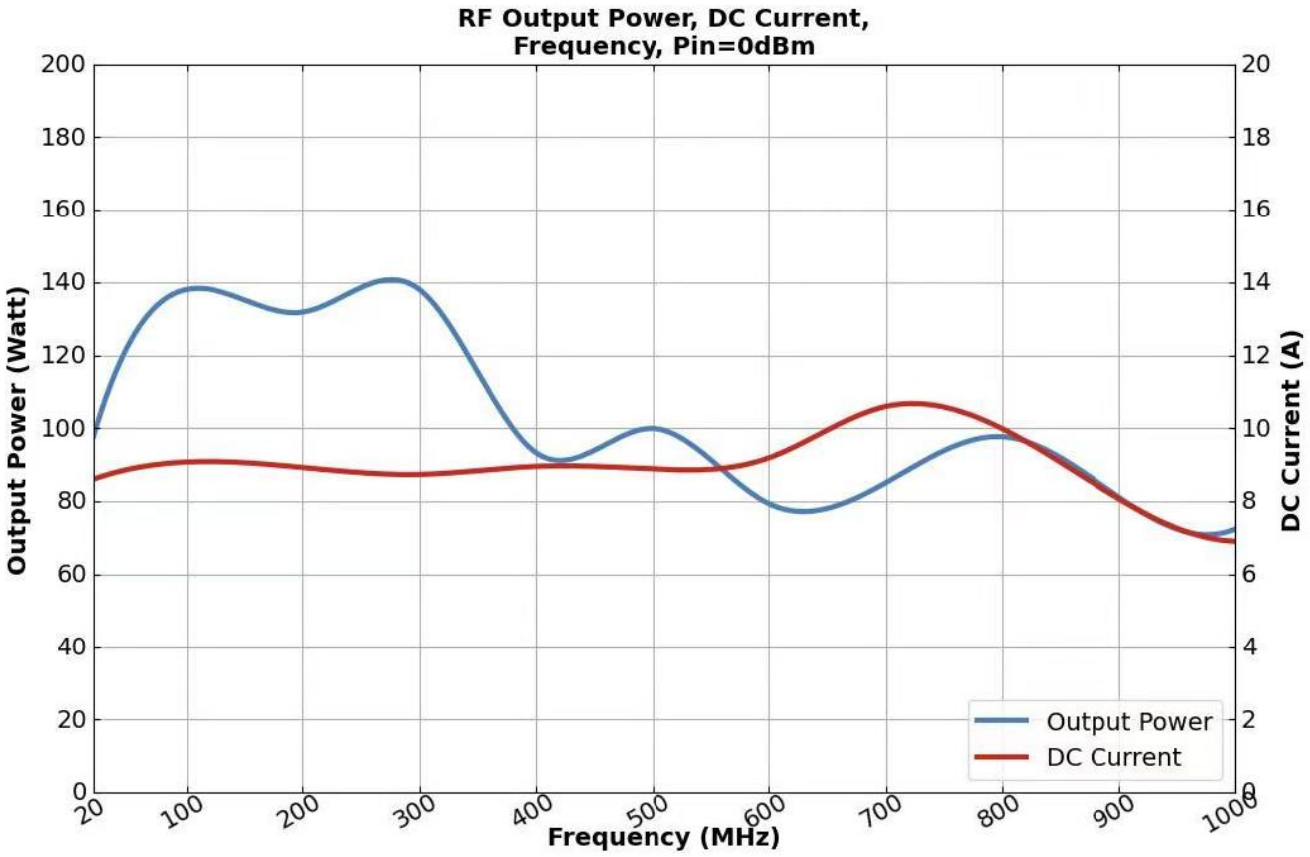
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Description	Specifications
1	SHUTDOWN	Amplifier Disable: TTL Logic High (3.3V～5V) (Internally Pulled-Low)
2	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
3	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
4	VDD	28V
5	VDD	28V
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	VDD	28V

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25±3℃)



Note: Adequate heatsink required.