

MODEL MM00810P49B
80~1000MHz
80 Watt
WIDE BAND POWER RF AMPLIFIER

Advantages:

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

ELECTRICAL SPECIFICATIONS @ +28.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	80		1000	MHz
RF Output Power @Pin=0dBm	P _{SAT}		80		Watt
Power Gain @Pin=0dBm	G _p		49		dB
Power Gain Flatness @Pin=0dBm	Δ G _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	0.8[1.76]	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	Min	Typ	Max	Units	Notes
Ambient Temperature	-40		60	°C	Operating case temperature up to +85°C
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)			95	%	

ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+5 dBm (Max)
Load VSWR @ P _{OUT} =30W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous.
Over Temperature	85°C @ heatsink [restored @ 60°C]

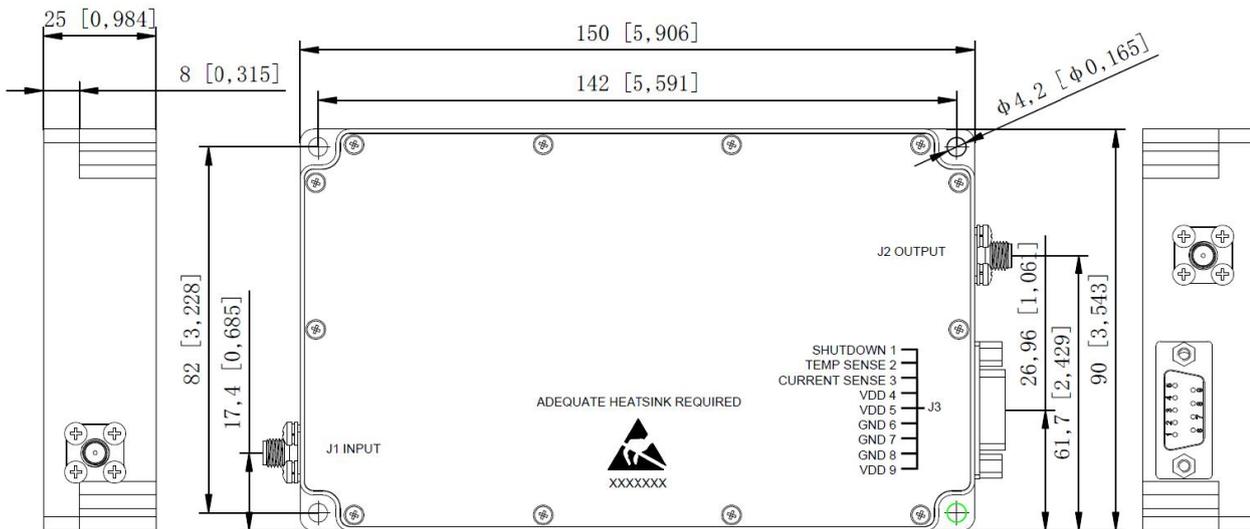
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Name	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	+28.0VDC
5	VDD	+28.0VDC
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	VDD	+28.0VDC

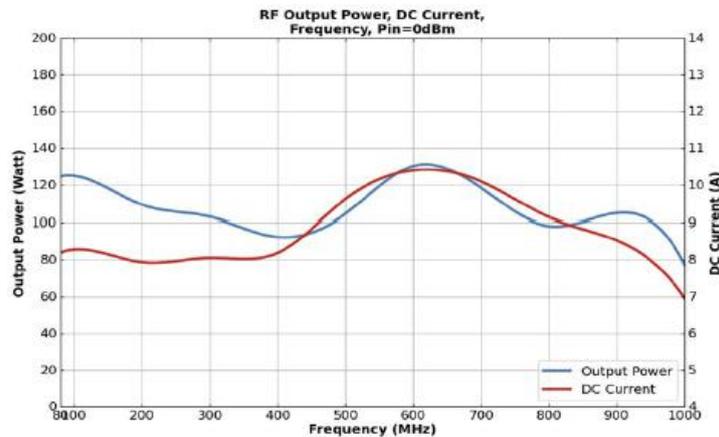
*If you need RS422 or RS485, Please contact the sales for customization.

OUTLINE DRAWING (All dimensions in mm [inch])



TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)(Please contact the sales for special requirements)

Output Power (Normal temp. +25±3°C)



Note: Adequate heatsink required.

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