



MODEL MM80120P50BV
8~12GHz
100 Watt
WIDE BAND RF POWER AMPLIFIER

Advantages:

- Operating Frequency: 8~12GHz
- Power Gain: 50dB Typical
- Psat: 100W 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	8		12	GHz
RF Output Power @Pin=0dBm	P _{sat}		100		Watt
Power Gain @Pin=0dBm	G _p		50		dB
Power Gain Flatness @Pin=0dBm	Δ G _p		±1.5		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics	H		-30		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	26	28	30	Volt
DC Current @100W	I _{DD}		16		Amp
Switch On/Off@10-90% Time, 1kHz	T _{ON/OFF}		1	2	μS

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	180x120x25 [7.09x4.72x0.98]	mm [inch]	Maximum
Weight	1.5 [3.31]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N, Female		
DC Interface Connector	Hybrid, D-Sub 7 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} =50W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous.
Over Temperature	95°C @ heatsink [restored @ 60°C]

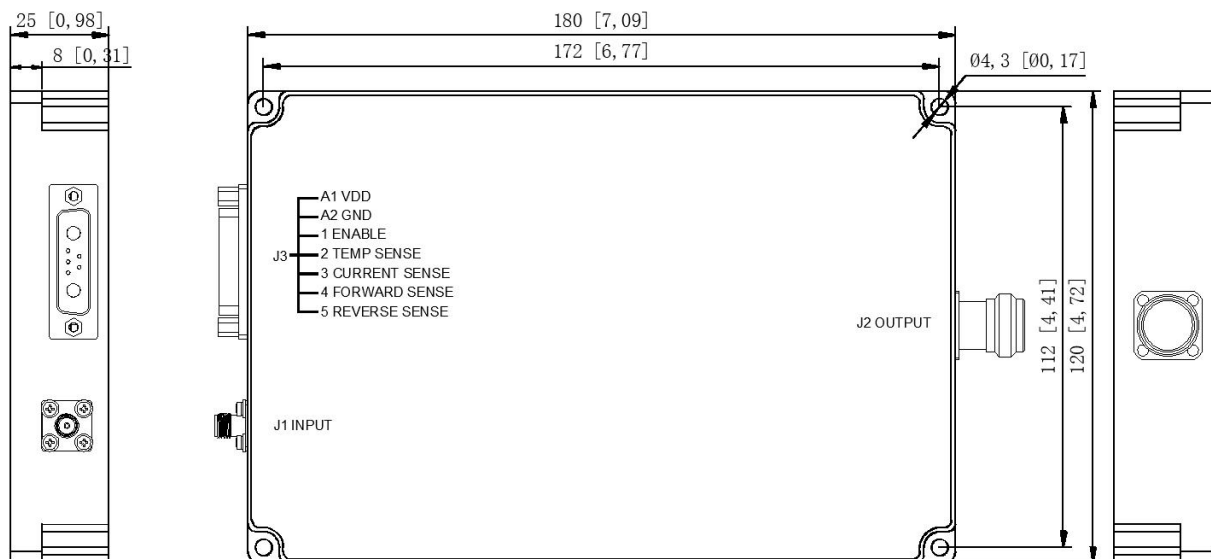
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Name	Specifications
A1	VDD	+28.0 VDC
A2	GND	Ground
1	ENABLE	Amplifier Enable: 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	FORWARD SENSE	Analog voltage relative to forward power level
5	REVERSE SENSE	Amplifier voltage relative to reflected power level

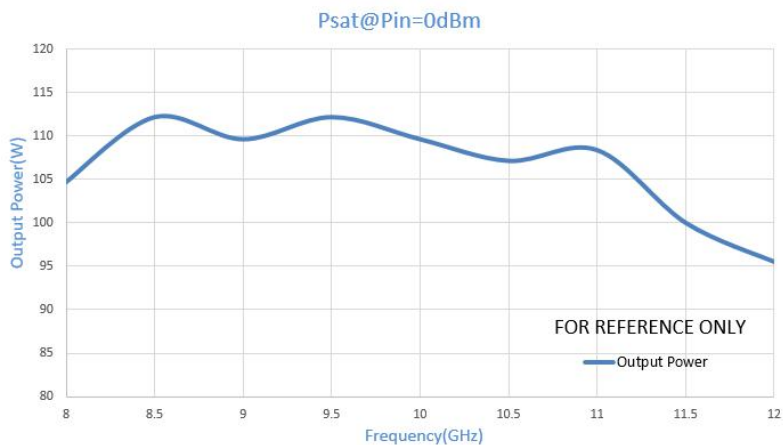
***If you need RS422 or RS485, Please contact the sales for customization.**

OUTLINE DRAWING (All dimensions in mm [inch],dimensional tolerance:±0.2mm(0.008 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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