



MODEL MM2060P50B
2~6GHz
100 WATT
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency: 2~6GHz
- Power Gain: 50dB Min
- P_{SAT}: 100W Min
- 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	2		6	GHz
RF Output Power @Pin=0dBm	P _{SAT}	100			Watt
Power Gain	G _p	50			dB
Power Gain Flatness	Δ G _p		±1.5		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @80W	H		-10		dBc
Spurious Signals	Spur		-60		dBc
Switching On/Off@10-90% Time,1kHz	T _{ON/OFF}		2		μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	24	28	32	Volt
DC Current @100W	I _{DD}		21		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	200x120x25[7.87x4.72x0.98]	mm [inch]	Maximum
Weight	1.8[3.97]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N, Female		
DC Interface Connector	J29A-25ZKP		
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

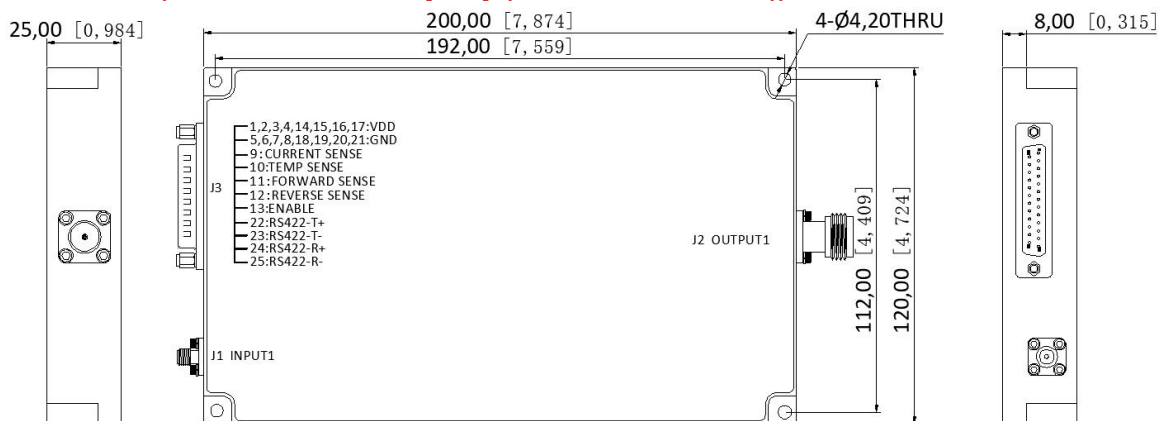
Input RF drive level without damage	+5 dBm (Max)
Load VSWR @ P _{OUT} =50W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous.
Over Temperature	95°C @ heatsink [restored @ 60°C]

POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

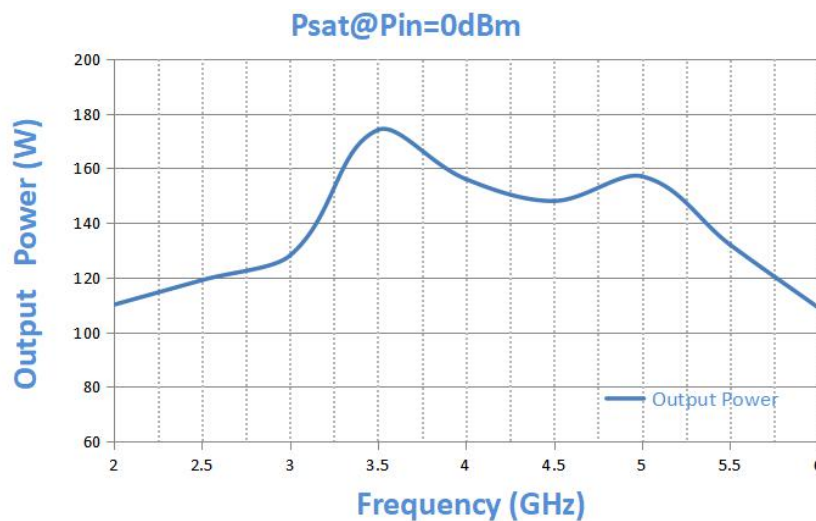
Pin #	Name	Specifications
1,2,3,4,14,15,16,17	VDD	+28.0VDC
5,6,7,8,18,19,20,21	GND	Ground
9	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
10	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
11	FORWARD SENSE	Analog voltage relative to forward power level
12	REVERSE SENSE	Amplifier voltage relative to reflected power level
13	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
22	RS422-T+	Include: ENABLE (Switching On/Off Time); CURRENT SENSE, TEMP SENSE, VOLTAGE SENSE, FORWARD SENSE, REVERSE SENSE, CURRENT ALARM, TEMP ALARM, VOLTAGE ALARM, VSWR ALARM
23	RS422-T-	
24	RS422-R+	
25	RS422-R-	

OUTLINE DRAWING (All dimensions in mm [inch], (FOR REFERENCE ONLY))



TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25 ± 3°C)



Note: Adequate heatsink required.

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