



MODEL MM2060P53A
2~6GHz
200 WATTS
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :2~6GHz
- Power Gain:53dB Typical
- Psat:200W MIN
- Supply Voltage:+28V
- 50 Ohms Input and Output Matched

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	2		6	GHz
RF Output Power @Pin=0dBm	P _{SAT}	200			Watt
Power Gain	G _p		53		dB
Power Gain Flatness	Δ G _p		±3		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @80W	H		-25	-17	dBc
Spurious Signals	Spur		-60		dBc
Switch 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 @200W	I _{DD}		45		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	330x280x33 [12.99x11.02x1.30]	mm [inch]	Maximum
Weight	7 [15.43]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N, Female		
DC Interface Connector	J29A-31ZK, Male		
Control Connector	J30J-09ZK, Male		
Cooling	Built-in Heatsink		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		60	°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} =100W	∞ @ 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

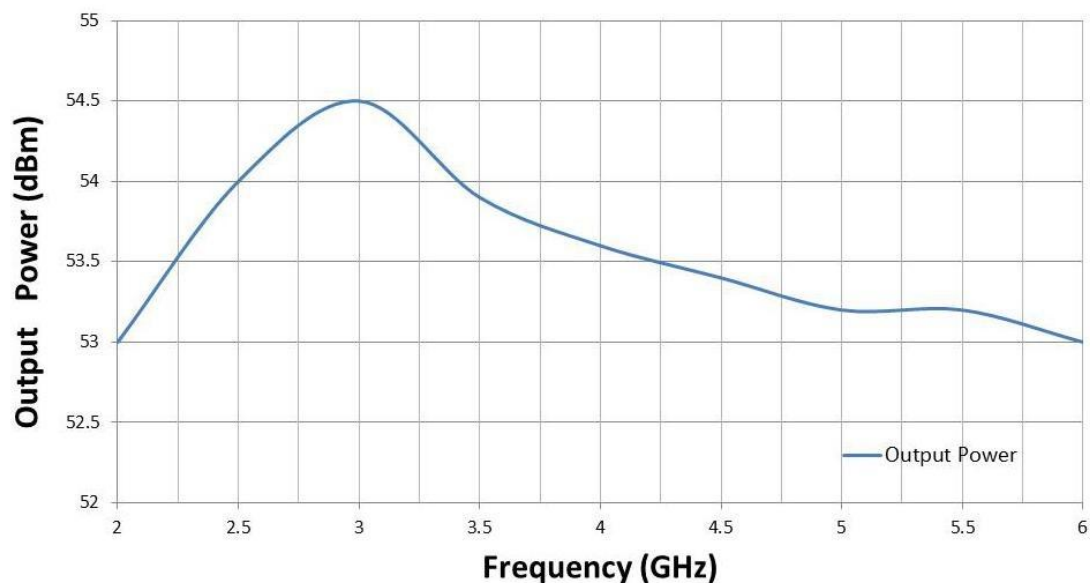
Male D-Sub is on the housing

Pin #	Description	Specifications
1-16	VDD	28VDC
17-31	GND	Ground

Pin #	Description	Specifications
1	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
2	GND	Ground
3	CURRENT SENSE	Analog voltage relative to I_{DD} @ 50mV per Ampere
4	TEMP SENSE	Analog voltage relative to Module's Temperature @ $0.5V+10\text{ mV}/^{\circ}\text{C}$
5	FORWARD SENSE	Analog voltage relative to forward power level
6	REVERSE SENSE	Analog voltage relative to reflected power level
7	ALARM	Amplifier Alarm indicator: Normally TTL Low
8	GND	Ground
9	NC	Not connection

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. $+25\pm 3^{\circ}\text{C}$)



Note: Adequate heatsink required.