



MODEL MM085093P50A
0.85~0.93GHz
100 Watt
NARROW BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :0.85~0.93GHz
- Power Gain:50dB Typical
- Psat:100W Typ
- Supply Voltage:+28V
- 50 Ohms Input and Output Matched

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	0.85		0.93	GHz
RF Output Power @Pin=0dBm	P _{SAT}		100		Watt
Power Gain	G _p		50		dB
Power Gain Flatness	Δ G _p		±1		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @60W	H		-15		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}		10		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	180x90x25 [7.08x3.54x0.98]	mm [inch]	Maximum
Weight	1.0 [2.2]	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	°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 minutes; 3:1 @ all load phase & amplitude continuous.
Over Temperature	85°C @heatsink [restored @ 60°C]



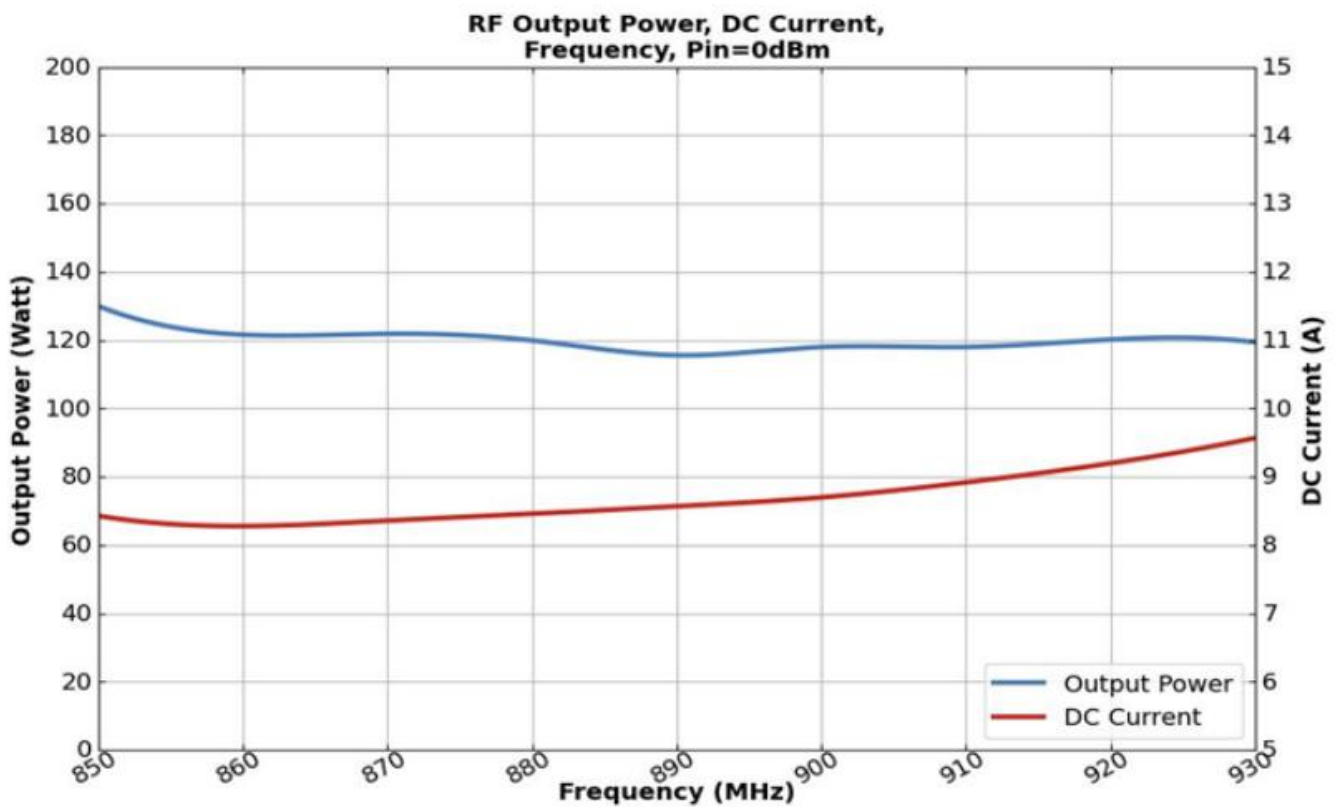
POWER INTERFACE CONNECTOR

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1	SHUT DOWN	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 I _{DD} @ 100mV per Ampere
4	VDD	28V _{DC}
5	VDD	28V _{DC}
6	VDD	28V _{DC}
7	GND	Ground
8	GND	Ground
9	GND	Ground

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25±3°C)



Note: Adequate heatsink required.