



MODEL MM1113P53A

1100~1300MHz

200 WATT

NARROW BAND HIGH POWER AMPLIFIER

Advantages:

- Operating Frequency: 1100~1300MHz
- Small Signal Gain: 53dB Typ
- P_{SAT}: 200W 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	1100		1300	MHz
RF Output Power	P _{SAT}		200		Watt
Power Gain	G		53		dB
Power Gain Flatness	Δ G		±1.5		dB
Input Return Loss	S ₁₁			-10	dB
Spurious Signals	Spur		-55		dBc
Switching Time @1kHz TTL	T _{on/off}		2	5	uSec
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	26	28	30	Volt
DC Current @200W	I _{DD}		20		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	220x130x30[8.66x5.12x1.18]	mm [inch]	Maximum
Weight	2.2[4.85]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	Type-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

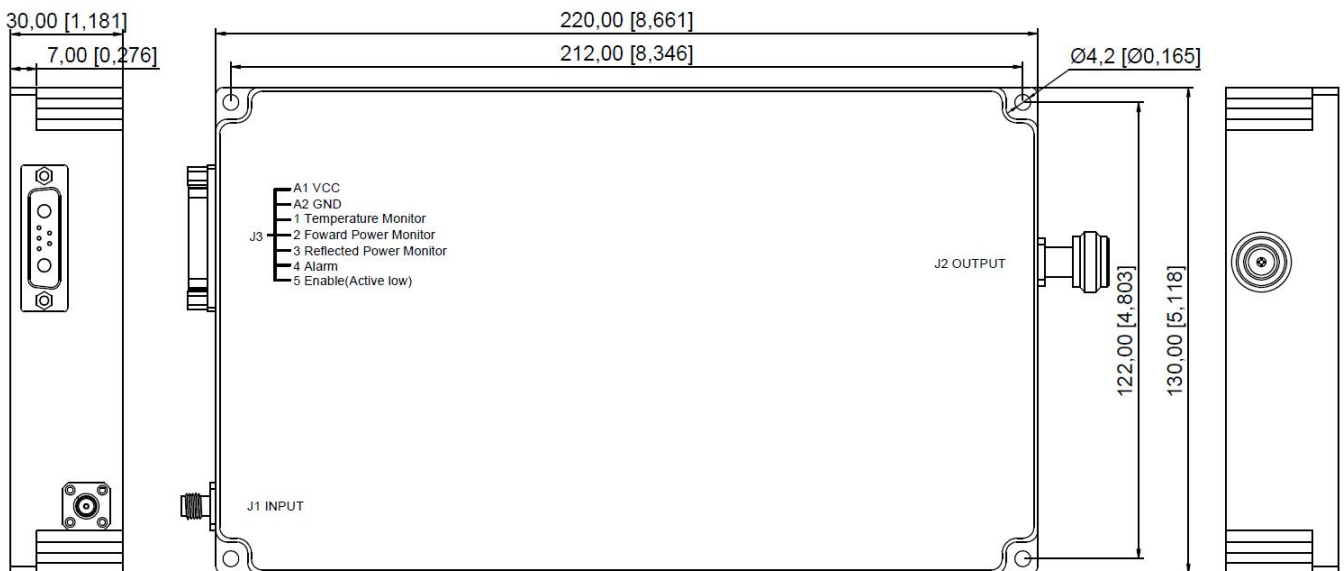
Input RF drive level without damage	+5dBm
Load VSWR @ P _{OUT} =80W	∞ @ all load phase & amplitude for duration of 1minute; 3:1 @ all load phase & amplitude continuous
Over Temperature	95°C @ heatsink [restored @ 60°C]

POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

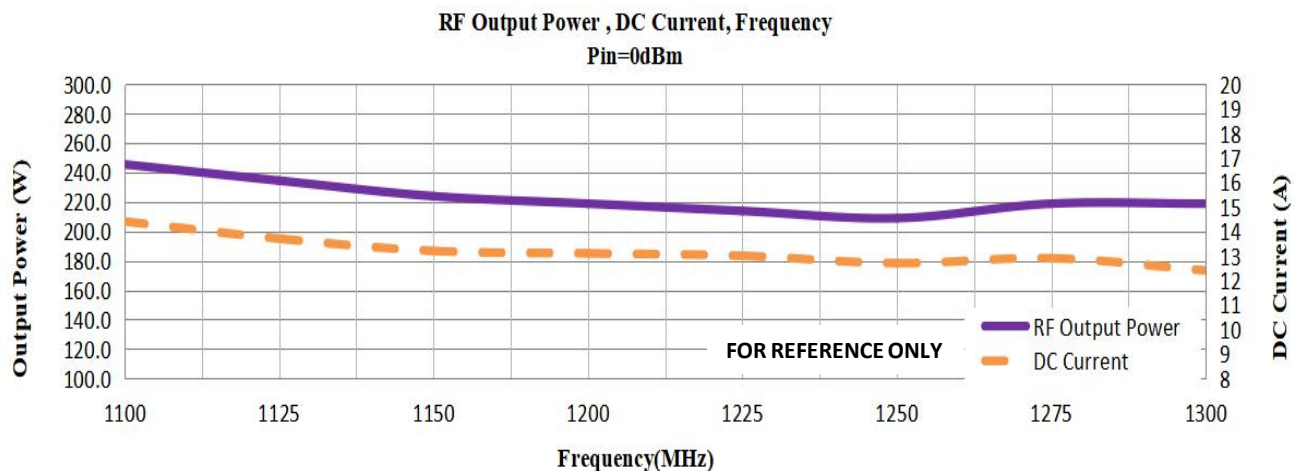
Pin #	Description	Specifications
A1	VCC	+28.0V
A2	GND	Ground
1	Temperature Monitor	Analog voltage relative to Module's Temperature @ 0.5V/10 mV/°C
2	Foward Power Monitor	Analog voltage relative to forward power level
3	Reflected Power Monitor	Amplifier voltage relative to reflected power level
4	Alarm	Alarm:TTL High
5	Enable(Active low)	Pulled-up @5V with 10kohm

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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