



MODEL MM002052P43A
20~520MHz
20 WATTS
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :20~520MHz
- Power Gain:43dB Typical
- Psat:20W Typical
- Supply Voltage:+28V
- 50 Ohms Input and Output Matched

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	20		520	MHz
RF Output Power @Pin=0dBm	PSAT	12	20		Watt
Power Gain	G _p		43		dB
Power Gain Flatness	Δ G _p		±2		dB
Third Order Intercept Point2 - Tone @ 27dBm/Tone, Δ = 500Hz	IP3		40		dBm
Input Return Loss	S ₁₁			-10	dB
Harmonics @10W	H		-15		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	24	28	32	Volt
DC Current @20W	I _{DD}		2.5		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	120x80x27 [4.72x3.15x1.06]	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	+10 dBm (Max)
Load VSWR @ POUT=10W	∞ @ all load phase & amplitude for duration of 30 minute; 4:1 @ all load phase & amplitude continuous.
Thermal Overload	85°C shutdown



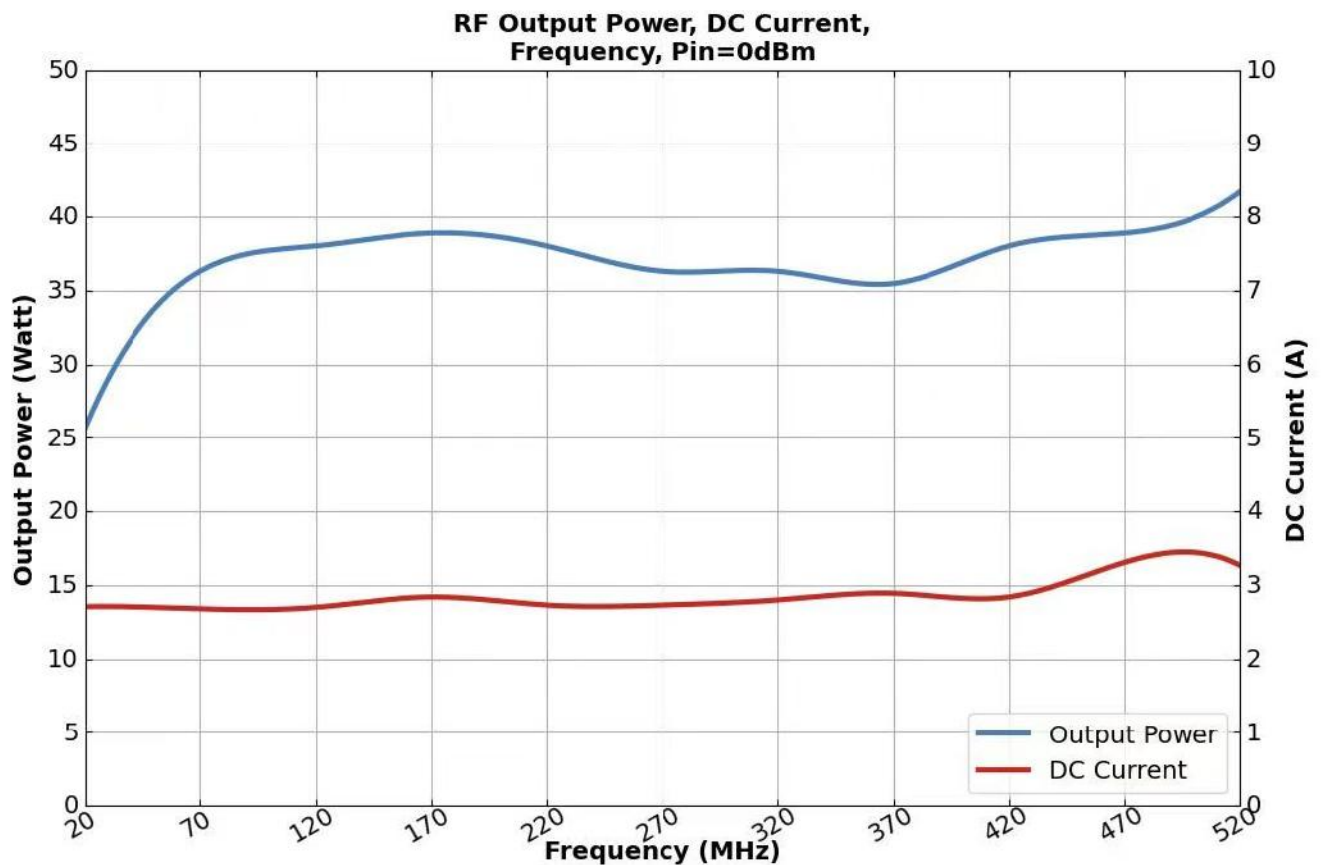
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Description	Specifications
1	VDD	28VDC
2	VDD	28VDC
3	VDD	28VDC
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	NC	No electrical connection
8	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
9	SHUTDOWN	Amplifier Disable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25±3°C)



Note: Adequate heatsink required.