This model MCW0472M50A is a multioctave high power amplifier operating between 400MHz and 7200MHz and offering a wide dynamic range with 100W Typ saturated power.The employment of Gallium Nitride (GaN) and chip-and-wire technology in manufacturing ensures this module state-of-the-art power performance with excellent power-to-volume ratio. It is ideal for RF systems, Communication, EMC, Test and Measurement applications. This module is equipped with alarmfunctions for over-temperature, over-voltage, over-current, which will shut down automatically under these conditions.

Features:

- Small Size and light weight
- Instantaneous ultra broadband
- 50 Ohms Input and Output matched
- Built-In control and protection circuits

Electrical Specifications (@+28VDC, 25°C, 50Ω)

Parameter	Symbol	Minimum	Typ	Maximum	Units
Operating Frequency	BW	400		7200	MHz
RF Output Power @PSAT	PSAT		100		Watt
Power Gain @PSAT	Gp		50		dB
Input Power for Rated PSAT	PIN		0		dBm
Power Gain Flatness	Δ Gp		±2		dB
Input Return Loss	S11			-10	dB
Harmonics @100W	H		-10		dBc
Spurious Signals @PSAT	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	34	36	38	Volt
Current Consumption @ Shutdown	ISD			0.1	Amp
DC Current @100W	IDD		13		Amp

Absolute Maximum Rating

Parameter	Rating	
Input RF drive level without damage	+10 dBm	Maximum
Load VSWR @ POUT =100W	3:1 @ all load phase & amplitude continuous	
Over Temperature	85°C Graceful Degradation	Maximum

Environmental Specifications (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	°C	
Storage Temperature	-25		65	°C	
Relative Humidity（non-condensing）			95	%	

Mechanical Specifications

Parameter	Value	Units	Notes
Dimensions	360x330x30 [14.17x12.99x1.18]	mm [inch]	Maximum
Weight	6 [13.2]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N, Female		
DC Interface Connector	Hybrid,D-Sub 7-Pin,Male		
Cooling	Extemal Heatsink(Not Supplied)		

DC Interface Connector

Pin #	Description	Specifications
A1	VDD	36VCC
A2	GND	Ground
1	ENABLE	Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled-Low)
2	CURRENT MONITOR	Analog voltage relative to IDD @ 100mV per Ampere
3	TEMP MONITOR	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	NC	No electrical connection
5	GND	Ground

Outline Drawing (All dimensions in mm [inch])

