



T/R MODEL MMTR1060P40A
1~6GHz
10 Watt
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :1~6GHz
- Power Gain: 40dB Typical
- Psat: 10W Typical
- Supply Voltage: +28V
- 50 Ohms Input and Output Matched

ELECTRICAL SPECIFICATIONS @ +28.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	1		6	GHz
TX RF Output Power @Pin=0dBm	P _{SAT}		10		Watt
Power Gain@Past	G _p		40		dB
Power Gain Flatness	Δ G _p		±2		dB
RX RF Output Power@Psat	R _{Xout}		0	5	dbm
Input Return Loss	S ₁₁			-10	dB
Harmonics @5W	H		-10		dBc
Spurious Signals	Spur		-60		dBc
Switching On/Off@10-90% Time,1kHz	T _{ON/OFF}		2	5	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	26	28	30	Volt
DC Current @10W	I _{DD}		3.5		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	120x90x25[4.72x3.54x0.98]	mm [inch]	Maximum
Weight	0.5[1.1]	Kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	J30J-9ZKP, 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=5W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous.
Over Temperature	85°C @ heatsink [restored @ 60°C]



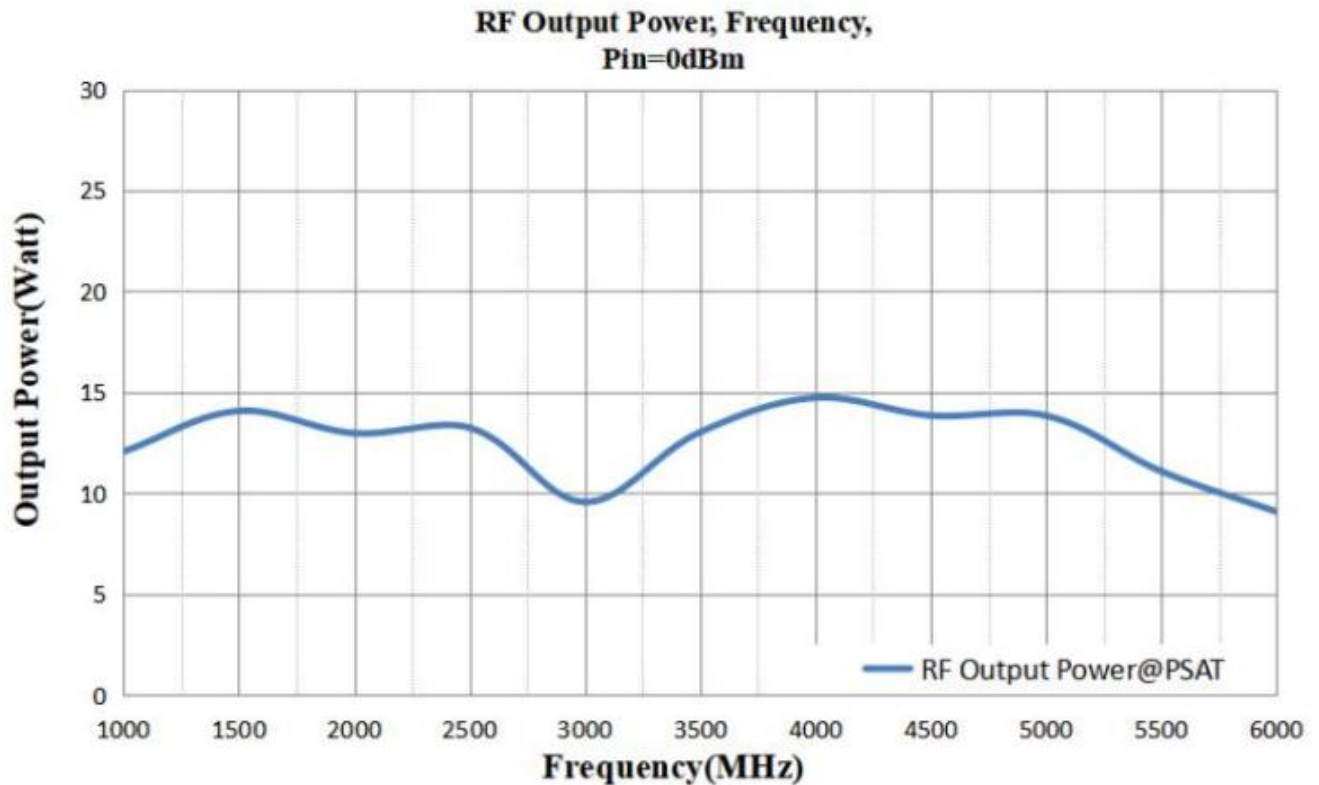
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Name	Specifications
1	VDD	+28.0V _{DC}
2	GND	Ground
3	CURRENT SENSE	Analog voltage relative to I _{DD} @ 100mV per Ampere
4	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
5	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
6	VDD	+28.0V _{DC}
7	GND	Ground
8	ALARM	Amplifier Alarm indicator: Normally TTL Low
9	GND	Ground

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25±3°C)



Note: Adequate heatsink required.