



MODEL MM60180P51FV
6~18GHz
120 Watt
WIDE BAND RF POWER AMPLIFIER

Advantages:

- Operating Frequency: 6~18GHz
- Power Gain: 51dB Typical
- P_{SAT}: 120W 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	6		18	GHz
RF Output Power @Pin=0dBm	P _{sat}	100	120		Watt
Power Gain @Pin=0dBm	G _p		51		dB
Power Gain Flatness @Pin=0dBm	Δ G _p		±2		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @60W	H		-20	-10	dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	24	28	30	Volt
DC Current @Psat	I _{DD}		29		Amp
Switch On/Off@10-90% Time,1kHz	T _{ON/OFF}		2	5	μS

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	240x150x80[9.45x5.91x3.15]	mm [inch]	Maximum
Weight	5 [11.02]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	FPWRD500		
DC Interface Connector	Hybrid, D-Sub 7-Pin, Male		
Cooling	With heatsink, forced air cooling		

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 (Max)
Load VSWR @ P _{OUT} =60W	∞ @ may cause PA damage 3:1 @ all load phase & amplitude continuous
Over Temperature	95°C @ heatsink [restored @ 60°C]

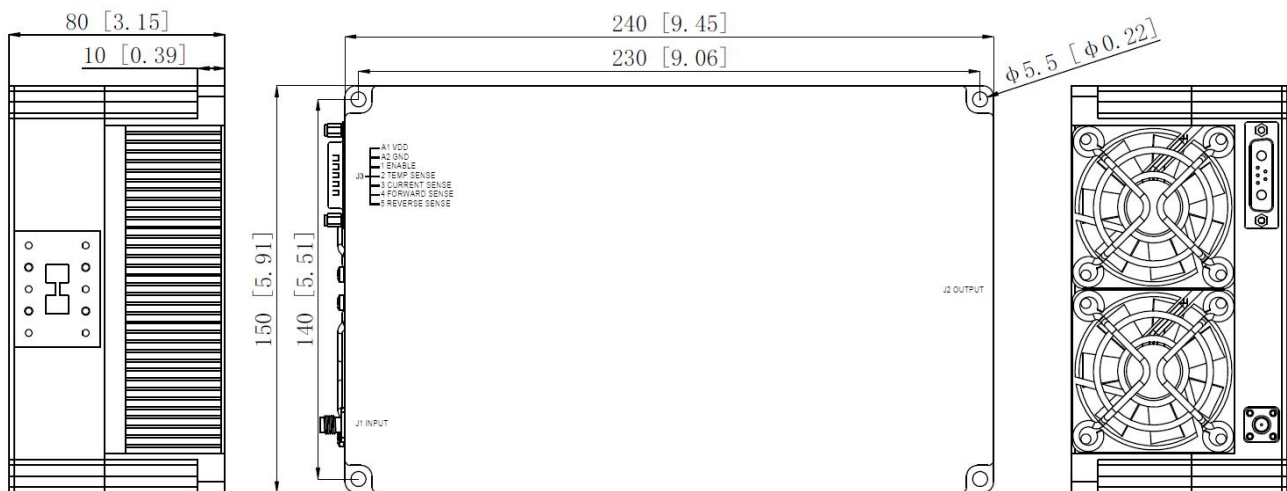
POWER INTERFACE CONNECTOR

Hybrid, D-Sub 7-Pin is on the housing

Pin #	Name	Specifications
A1	VDD	+28.0 VDC
A2	GND	Ground
1	ENABLE	Amplifier Enable: 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 IDD @ 100mV per Ampere
4	FORWARD SENSE	Analog voltage relative to forward power level
5	REVERSE SENSE	Amplifier voltage relative to reflected power level

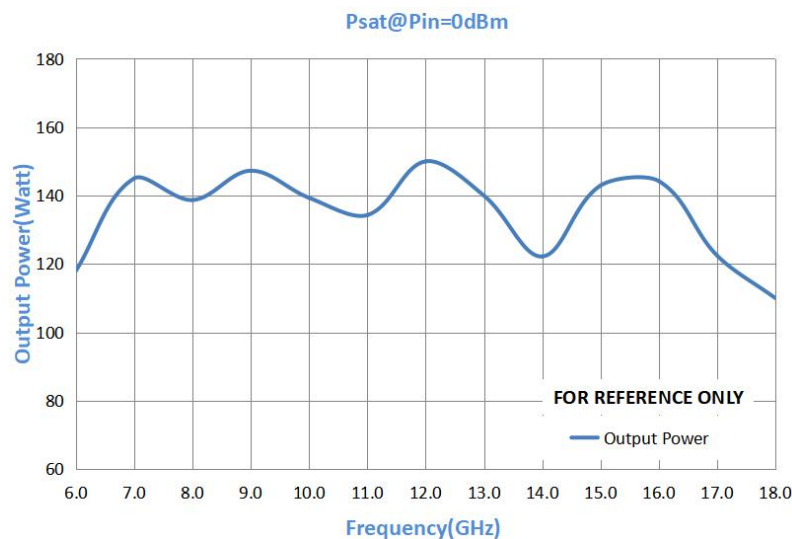
***If you need RS422 or RS485, Please contact the sales for customization.**

OUTLINE DRAWING (All dimensions in mm [inch],dimensional tolerance:±0.2mm(0.008 inch))



TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)(Please contact the sales for special requirements)

Output Power (Normal temp. +25±3°C)



Note: Don't cover air duct.

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