MODEL MM60180P43C
6～18GHz
20 WATTS
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :6～18GHz
- 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	6		18	GHz
RF Output Power @Pin=0dBm	P_{SAT}		20		Watt
Power Gain	G_p		43		dB
Power Gain Flatness	ΔG_p		±2.5		dB
Input Return Loss	S_{11}			-10	dB
Harmonics @10W	H		-20	-10	dBc
Spurious Signals	Spur		-60	-55	dBc
Switch On/Off @10-90% Time,1kHz	$T_{ON/OFF}$		2	3	μs
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V_{DC}	26	28	30	Volt
DC Current @20W	I_{DD}		7		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	150x90x25 [5.91x3.54x0.0.98]	mm [inch]	Maximum
Weight	1.2[2.64]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-Pin, Male		
Cooling	External Heat sink 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 =8W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous.
Over Temperature	85°C @ heatsink [restored @ 60°C]

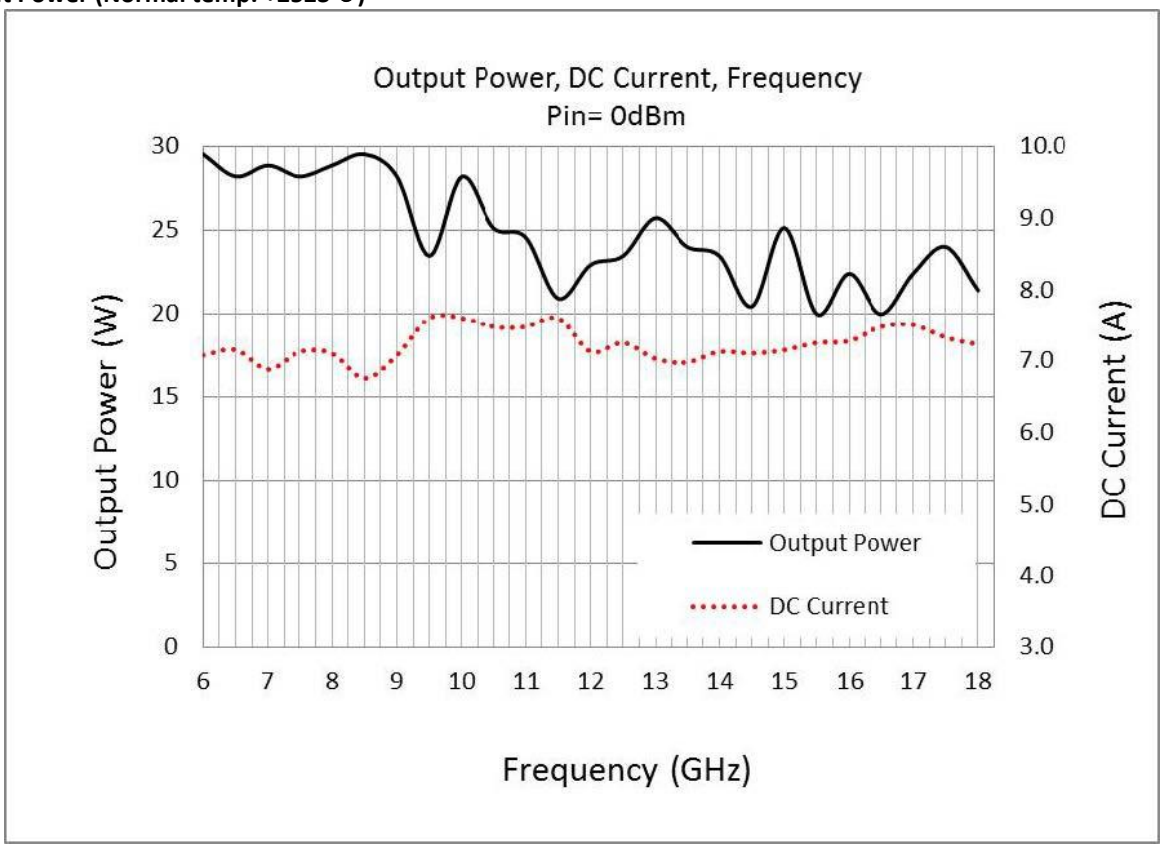
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

Pin #	Description	Specifications
1	VDD	28VDC
2	VDD	28VDC
3	VDD	28VDC
4	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
5	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)

Output Power (Normal temp. +25±3℃)



Note: Adequate heatsink required.