

MODEL MM60180P40B
6~18GHz
10 WATTS
WIDE BAND POWER RF AMPLIFIER

Advantages:

- Operating Frequency :6~18GHz
- Power Gain:40dB Typical
- Psat:10W 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} | | 10 | | Watt |
| Power Gain | G _p | | 40 | | dB |
| Power Gain Flatness | Δ G _p | | ±2 | | dB |
| Input Return Loss | S ₁₁ | | | -10 | dB |
| Harmonics @5W | H | | -20 | | dBc |
| Spurious Signals | Spur | | -60 | -55 | dBc |
| In/Output Impedance | Impedance | | 50 | | Ω |
| Operating Voltage | V _{DC} | 26 | 28 | 30 | Volt |
| DC Current @10W | I _{DD} | | 3 | | Amp |
| Switch On/Off@10-90% Time ,1kHz | T _{ON/OFF} | | 2 | 5 | μs |

MECHANICAL SPECIFICATIONS

| Parameter | Value | Units | Notes |
|------------------------|--|-----------|---------|
| Dimensions | 150x90x25[5.91x3.54x0.98] | mm [inch] | Maximum |
| Weight | 0.8[1.76] | 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 @ P _{OUT} =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] |

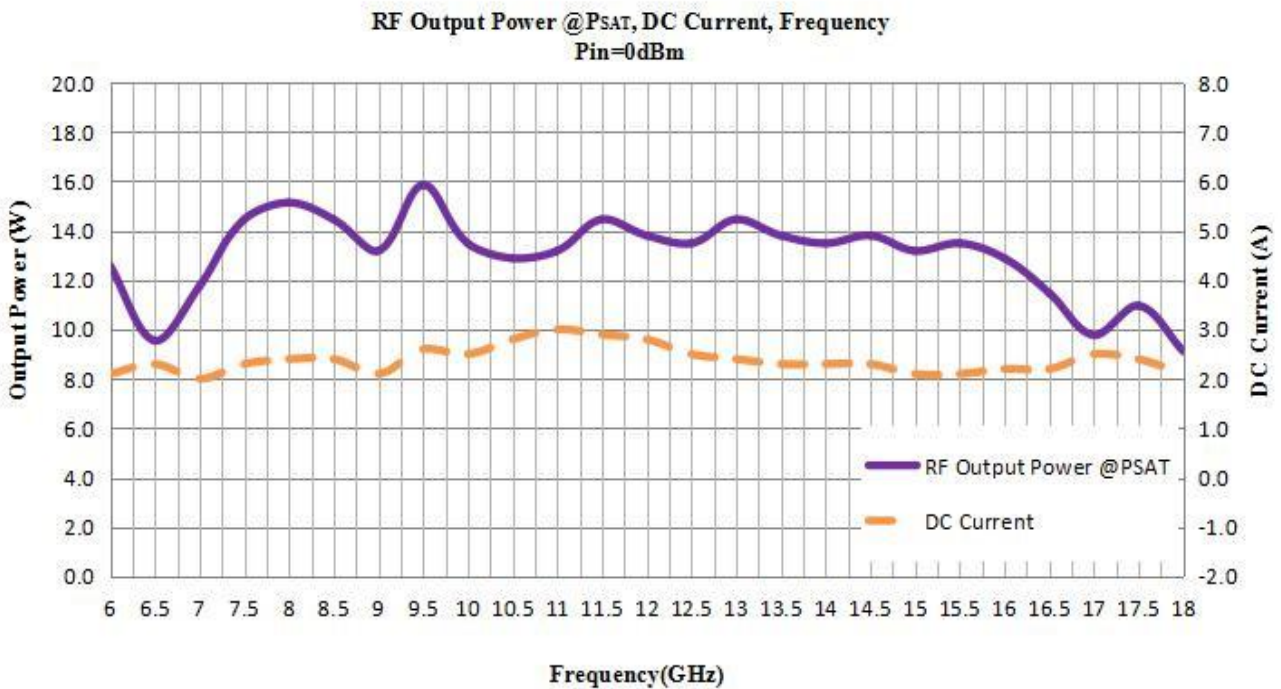
POWER INTERFACE CONNECTOR

Male D-Sub is on the housing

| Pin # | Description | Specifications |
|-------|---------------|--|
| 1 | VDD | 28 V |
| 2 | VDD | 28 V |
| 3 | VDD | 28 V |
| 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 | ALARM | Amplifier Alarm indicator: Normally TTL Low |
| 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°C)



Note: Adequate heatsink required.