

TURPA80M1G-6363BC

TURPA80M1G-6363BC is a solid state high power amplifier systems provides high output power and high gain across the 80MHz to 1GHz frequency range. The amplifier features a built-in 380V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Frequency range: 80MHz-1GHz
- Gain: 63dB Min
- Psat Output Power:63dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR,open/circuit break,overexcitation protection
- 50 Ohm Matched Input / Output

电气特性 Electrical Characteristics:

| 参数 Parameter         |              | 代码 Symbol | Min        | Typ | Max | 单位 Units |
|----------------------|--------------|-----------|------------|-----|-----|----------|
| 频率范围 Frequency range |              | BW        | 80MHz-1GHz |     |     |          |
| 功率增益 Power Gain      |              | GP        | 63         |     |     | dB       |
| 增益平坦度 Gain flatness  |              | ΔGL       |            |     | ±5  | dB       |
| 饱和输出功率 Output Psat   | @80-400MHz   | Psat      | 2000       |     |     | W        |
|                      | @400MHz-1GHz |           | 1000       |     |     |          |
| 线性输出功率 Output P1dB   | @80-400MHz   | P1dB      | 1600       |     |     | W        |
|                      | @400MHz-1GHz |           | 800        |     |     |          |
| 杂散 Spurious          |              | Spur      |            |     | -50 | dBc      |
| 谐波 Harmonics         |              | HAM       |            |     | -18 | dBc      |
| 输入驻波 Input VSWR      |              | VSWRin    |            |     | 2   | :1       |
| 交流电压 AC Voltage      |              | Vac       |            | 380 |     | V AC     |
| 功耗 Power Consumption |              | Pdiss     |            |     | 10  | KW       |
| 阻抗 Impedance         |              | I/O-IMP   | 50         |     |     | Ohms     |

机械特性 Mechanical Specifications:

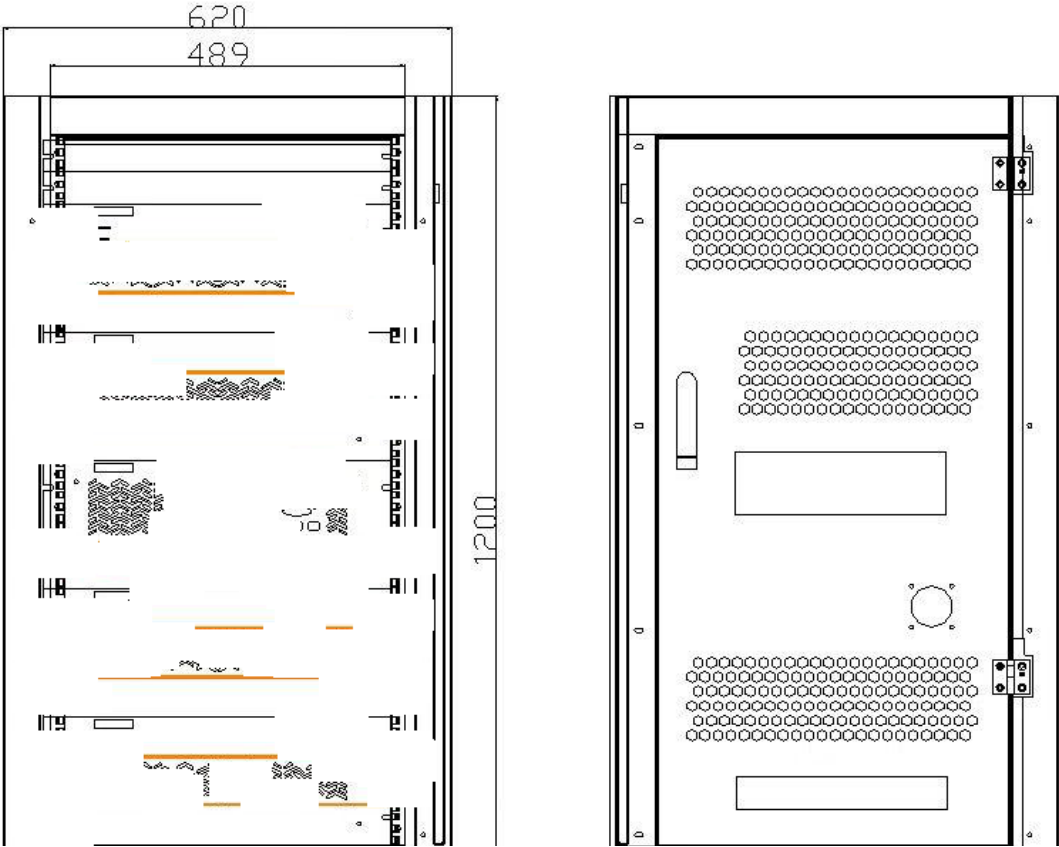
| 参数 Parameter                     | 指标 Value                            | 单位 Units |
|----------------------------------|-------------------------------------|----------|
| 输入/输出接口 Input /Output Connector  | N Female/7/16 DIN Female (optional) |          |
| 正向/反向耦合 Forward/Reverse Coupling | N Female/ N Female (optional)       |          |
| 尺寸 Size                          | 800*1200*1400/19 Inch*1400          | mm       |
| 重量 Weight                        | ≤180                                | Kg       |

Note: Dual directional coupler can be selected as built-in or external.

绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 输入功率 RF Input Power          | 0 dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

外形图 Outline Drawing: Unit:mm



主要功能 Key Features:

| 参数 Parameter                | 特点 Advantages                                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 控制功能 Control functions      | 1, Power setting On/Off<br>2,Gain adjustable,supporting manual or software control(Paid option features)                                                           |
| 内置保护功能 Protection functions | 1,Over TEM: 70℃<br>2,Over voltage<br>3,Over current<br>4,Over VSWR: 5:1 (adjustable)<br>5,Open/circuit break<br>6,Overexcitation:2300W@80-400MHz;1300W@400MHz-1GHz |
| 显示功能 Display function       | Power Amplifier Status Monitoring<br>(Paid option features)                                                                                                        |
| 监控和控制 Remote control        | GPIB/Ethernet                                                                                                                                                      |
| 冷却系统 Cooling system         | Built in Cooling system,forced air cooling                                                                                                                         |

温度环境 Environmental Conditions:

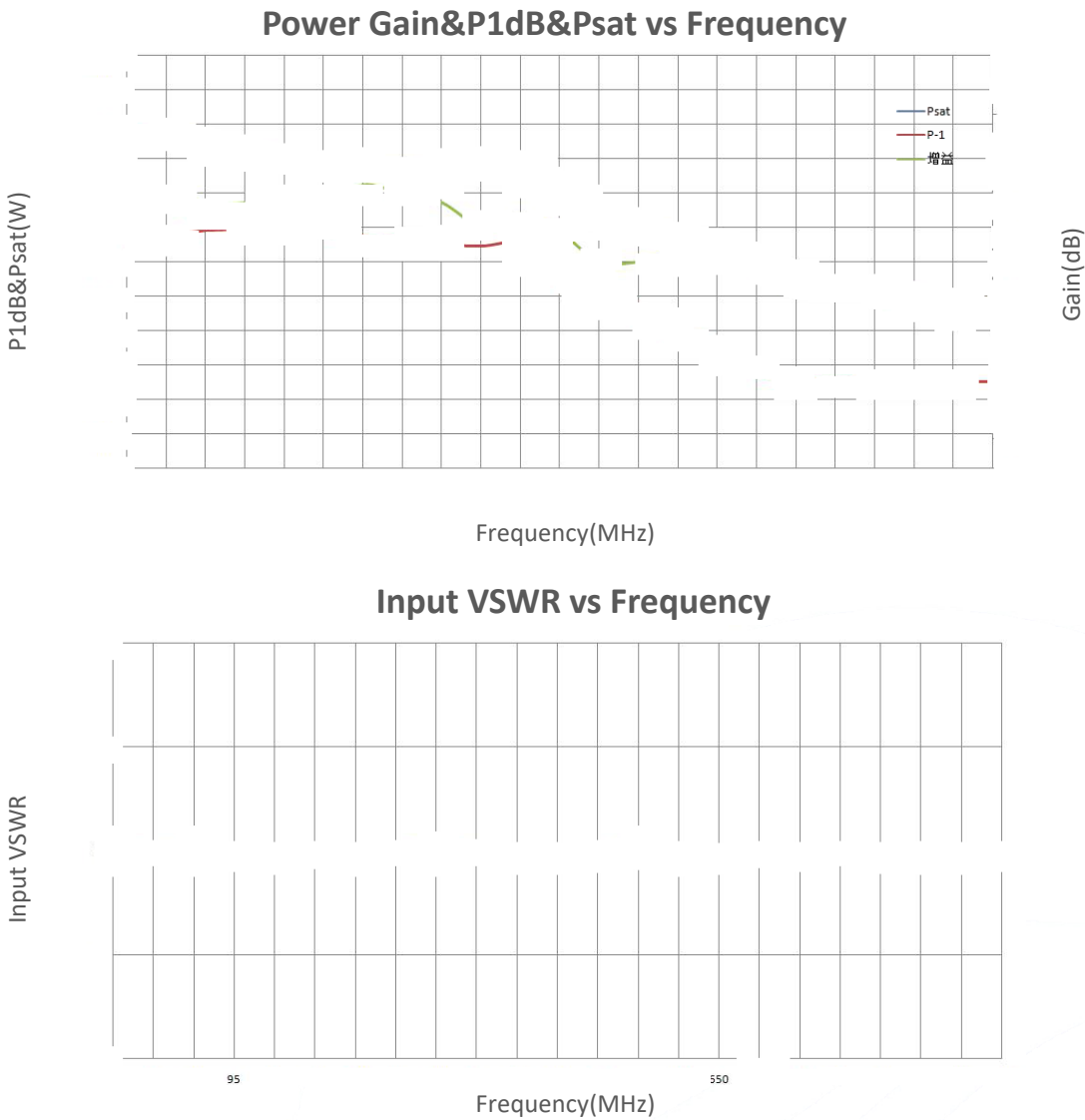
| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature*        | 0                                                   |     | 40  | ℃        |
| 存储温度 Non-operating Temperature*    | -15                                                 |     | +65 | ℃        |
| 相对湿度 Relative humidity             |                                                     | 95  |     | %        |
| 海拔 Altitude                        | 10,000                                              |     |     | feet     |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |     |          |
| 冲击 Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |     |     |          |

\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

| 标准型号 Base Number  | 描述 Description                                                                                        | 版本号 Revision |
|-------------------|-------------------------------------------------------------------------------------------------------|--------------|
| TURPA80M1G-6363BC | Solid State High Power Amplifier Systems 0.08-1GHz,Gain:63dB,Psat:63 dBm,380V AC,Built in Fan Cooling | Rev.1.1      |

典型曲线 Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.