

**Model:TLPA0.1M400M-53-53-BC**
**Solid State High Power Amplifier Systems  
 0.1-400MHz,Gain:53dB,Psat:200W,220V AC**
**Feature:**

- Wide Band: 0.1-400MHz
- Gain: 53dB Min
- Psat Output Power:200W Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection.
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

| Parameter        | Symbo       | Min                        | Typ | Max       | Units       |
|------------------|-------------|----------------------------|-----|-----------|-------------|
| Frequency range  | BW          | 0.1-400                    |     |           | MHz         |
| Power Gain       | GP          | 53                         |     |           | dB          |
| Gain flatness    | $\Delta$ GL |                            |     | $\pm 3.5$ | dB          |
| Output Psat      | Psat        | 200                        |     |           | W           |
| Output P1dB      | P1dB        | 150                        |     |           | W           |
| Spurious         | Spur        |                            |     | -50       | dBc         |
| Harmonics        | HAM         |                            |     | -15       | dBc         |
| Input VSWR       | VSWRin      |                            |     | 2.0       | :1          |
| AC Voltage       | Vac         | 220 $\times$ (1 $\pm$ 10%) |     |           | V AC        |
| Impedance        | I/O-IMP     |                            | 50  |           | Ohms        |
| Input DC Power   |             | $\leq 800W$                |     |           | A           |
| Over VSWR        |             | 5                          |     |           | :1          |
| Over Excited     |             | $> 200$                    |     |           | W           |
| Over Temperature |             | 60                         |     |           | $^{\circ}C$ |

**Mechanical Specifications:**

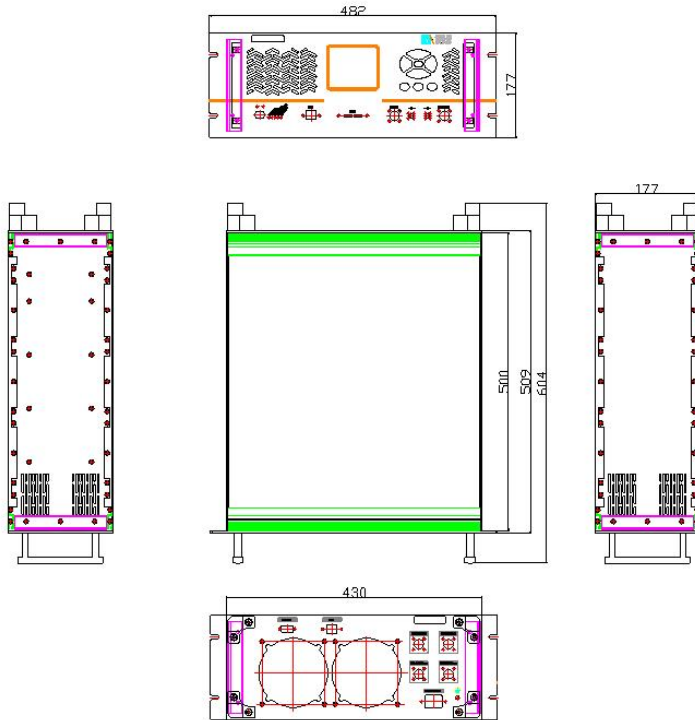
| Parameter               | Value             | Units |
|-------------------------|-------------------|-------|
| Input /Output Connector | N Female/N Female |       |
| Coupling Connector      | N Female          |       |
| Control Connector       | GPIB/Ethernet     |       |
| Size                    | 19 Inch 4U        | mm    |
| Weight                  | $\leq 25$         | Kg    |

### Absolute Maximum Ratings:

| Parameter             | Value                |
|-----------------------|----------------------|
| RF Input Power        | 0 dBm                |
| ESD sensitivity (HBm) | Class 0, passed 150V |

### Outline Drawing:

Unit: mm



### Key Features:

| Parameter            | Advantages   |
|----------------------|--|
| Control functions    | 1, Power setting On/Off<br>2, Gain adjust (Additional fees are required)                   |
| Protection functions | 1, Over TEM<br>2, Over voltage<br>3, Over current<br>4, Over VSWR<br>5, Open/close circuit |
| Remote control       | GPIB/Ethernet  |
| Display functions    | Real-time condition display (Additional fees are required)                                 |
| Cooling system       | Built in Cooling system, forced air cooling  |

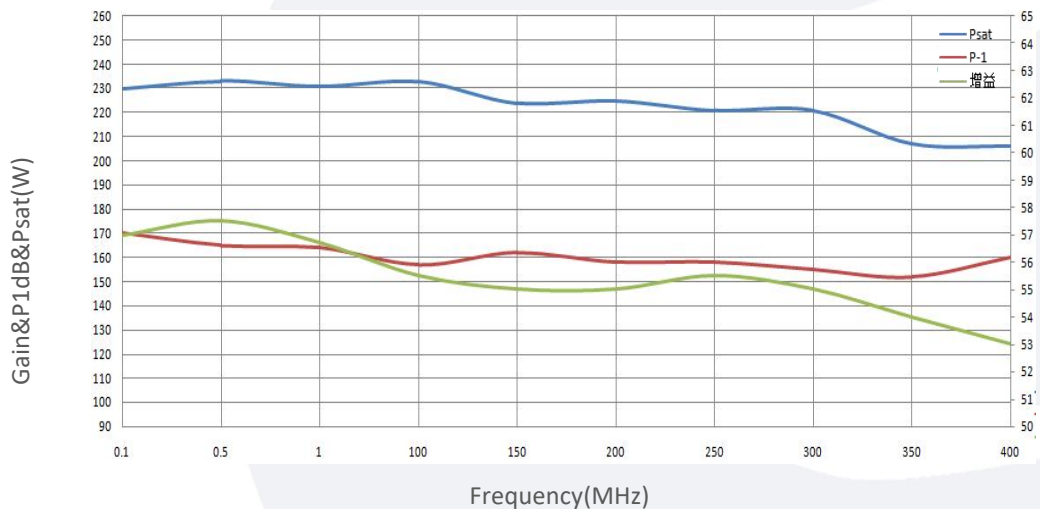
**Environmental Conditions:**

| Parameter                        | Min   | Typ | Max | Units |
|----------------------------------|---|-----|-----|-------|
| Operating Temperature*           | 0   |     | 40  | °C    |
| Non-operating Temperature*       | -15   |     | 65  | °C    |
| Relative humidity                |   | 95  |     | %     |
| Altitude                         | 10000   |     |     | feet  |
| Shock / Vibration(MIL-STD- 810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |     |       |
| Shock(non operating)             | 20G for 11msc half sin wave,3 axis both directions  |     |     |       |

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

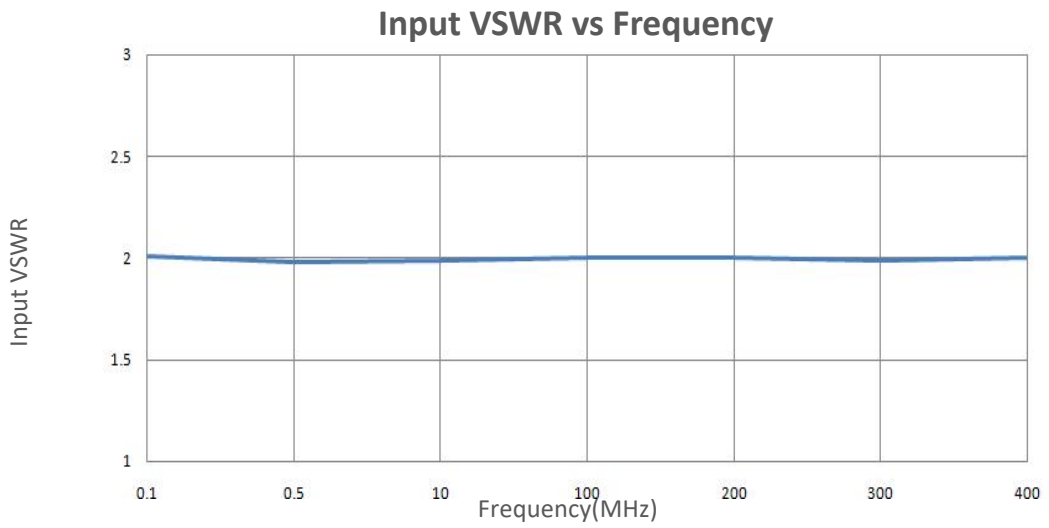
**Ordering Information:**

| Part Number           | Description  | Revision |
|-----------------------|--|----------|
| TLPA0.1M400M-53-53-BC | Solid State High Power Amplifier Systems 0.1-400MHz,Gain:53dB,Psat:200W,220V AC,Built in Fan Cooling | Rev.1.0  |

**Typical Performance Data:**
**Gain&P1dB&Psat vs Frequency**


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.

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