



The MP881/25/50MK-A1 is a broadband and high power amplifier for 869-894 MHz frequency band. It is suitable for GSM & CDMA communication operation. The amplifier employs advance LDMOS power devices that provide ample output power, wide dynamic range, broad band, and high efficiency. Output isolator is included.

Model: MP881/25/50MK-A1

| 1. Electrical Characteristics | | |
|---------------------------------|---|--|
| Item | Value | Note |
| Frequency Range | 869 ~ 894 MHz | Instantaneous Bandwidth 14 MHz |
| Power Gain | 50 ± 1.0 dB | |
| Gain Flatness | ± 0.5 dB (Max.) | |
| Output Power P1 | +49 dBm (Typ.) | |
| Output Power Psat | +51 dBm (Min.) | |
| Input VSWR | 1.5:1 (Max.) | |
| IP3 | +65 dBm (Min.) | 2 Tones @ +39 dBm/ Tone, 1 MHz Spacing |
| Harmonics | -45 dBc (Max.) | Pout @ +42 dBm |
| Spurious | -70 dBc (Max.) | Pout @ +42 dBm |
| Enable/Disable | TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable | |
| Forward Power Monitor | 2.4 ± 0.2 V @ +42 dBm | RMS Detection Range > 25 dB |
| Reflect Power Monitor | 2.4 ± 0.2 V @ +42 dBm | RMS Detection Range > 25 dB |
| ALC Control | +5V: ALC Off 0V: ALC On | Pin 3 |
| ALC Level Input | 0-5 V | Pin 4 |
| ACL Range | > 15 dB | |
| ALC Accuracy | ± 0.5 dBm (Max.) | |
| DC Input | 28Vdc ± 2V | |
| DC Current | 3.0 A (Max.) | Pout @ + 42 dBm |
| In/Output Impedance | 50 Ω | Isolator Included |
| Max. Input Power without Damage | +5 dBm | |

| 2. Mechanical Characteristics | | |
|-------------------------------|---------------------|--------------|
| Monitoring Connector | DB-9 Male | 4 – 40 screw |
| RF IN/OUT Connector | SMA 4 Holes Female | |
| DC Input | Pin 6,7 on DB-9 | |
| Dimensions | 6.4" x 3.4" x 0.93" | |
| Weight | 1.5 lb | |

| Revision History | | | |
|------------------|------------------|------|--------------|
| REV | Reason to Change | Date | Initialed by |
| | | | |

| 3. Environment Characteristics | | |
|--------------------------------|--------------------|------------|
| Operating Temperature | -20°C ~ +85°C | Base Plate |
| Cooling | External Heat Sink | |
| Humidity (Non-condensing) | 95% (Max.) | |

| 4. DB9 Pin Description | | |
|------------------------|-----------------------|--|
| 1 | Forward Power Monitor | |
| 2 | Reverse Power Monitor | |
| 3 | ALC On/Off | |
| 4 | ALC Level Input | 0-5V |
| 5 | Enable / Disable | Enable: TTL Low or Open Disable: TTL High |
| 6, 7 | + 28V | |
| 8 | | |
| 9 | Ground | |

5. Outline Drawing

