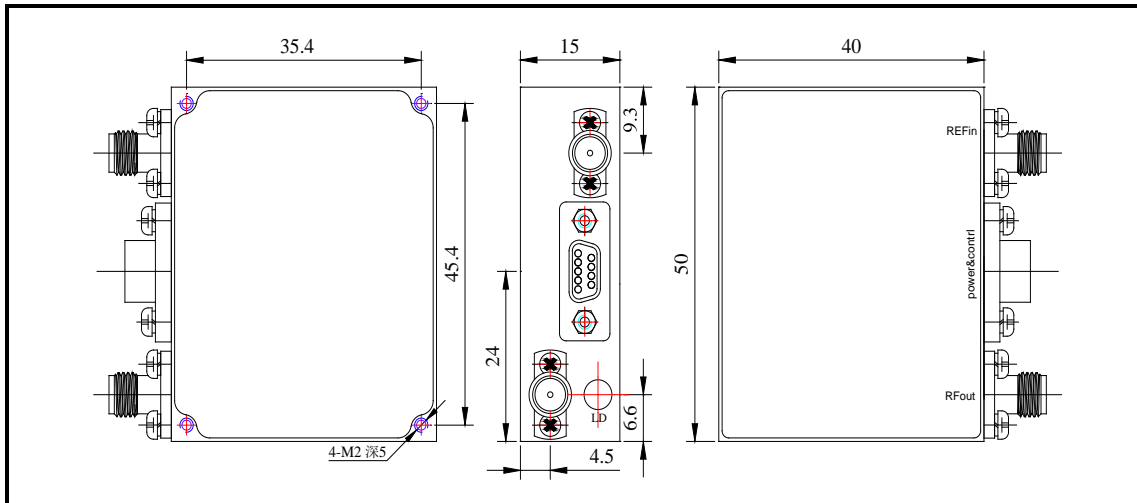


General High-frequency Frequency Synthesizer



| | | | | | |
|--|---------------|---|-------|-----------------------|-------|
| Description: | | | | | |
| 1. Internal 50MHz TCXO; | | | | | |
| 2. Detection options: internal and external reference for adaptive switching; | | | | | |
| 3. Used in 7300 ~ 8800, 11500 ~ 13400M output; | | | | | |
| 4. For narrowband high frequency synthesizer or high frequency point frequency output. | | | | | |
| Frequency range (MHz) | | 7300~8200 7800~8800 11500~12500 12400~13400 | | | |
| Output Level (dBm) | | ≥+13 | | | |
| Step (MHz) | | 2 | | | |
| Frequency switching (μs) | | ≤600 | | | |
| Steady Frequency temperature stability | | ±3×10 ⁻⁷ (Same as external reference) | | | |
| Frequency accuracy | | ±3×10 ⁻⁷ (Same as external reference) | | | |
| Spurious (dBc) | | ≤-65 (1/2Fo≤-20) | | | |
| Harmonics (dBc) | | ≤-30 | | | |
| Phase Noise | dBc/Hz@100Hz | @8GHz HMC764LP6GE | ≤-64 | @13GHz HMC807LP6GE | ≤-61 |
| | dBc/Hz@1kHz | | ≤-84 | | ≤-81 |
| | dBc/Hz@10kHz | | ≤-94 | | ≤-91 |
| | dBc/Hz@100kHz | | ≤-95 | | ≤-91 |
| | dBc/Hz@1MHz | | ≤-115 | | ≤-112 |
| Power supply (V/mA) | | +12V/250 | | | |
| Connector | | RF connector: SMA-KFD Control and power connector: J30J-9ZKP | | | |
| Dimensions | | 50×40×15mm | | | |
| Control | | SPI/UART | | | |
| Operating temperature (°C) | | -40~+70 | | | |
| Storage temperature (°C) | | -55~+85 | | | |



Notes: Internal reference with 50MHz TCXO, the phase noise does not reach the floor of the chip noise, for better phase noise to be synchronized outside the reference.

DB9/J30J-9 Common Interface Definition (SPI and serial control)

| Pin number | Pin definition | Function | Pin number | Pin definition | Function |
|------------|----------------|------------------------------|------------|----------------|-----------|
| 1 | U/S | Communication mode selection | 6 | SCLK | SPI Clock |
| 2 | TXD | Serial transmission | 7 | MOSI | SPI DATA |
| 3 | RXD | Serial receive | 8 | GND | GND |
| 4 | NSS | SPI LE | 9 | +12V | Power |
| 5 | MISO | SPI DATA | | | |

Notes: When the U / S is set to high, the system is serial communication, U / S is set to low, the system for the SPI communication; this pin is floating when the high.