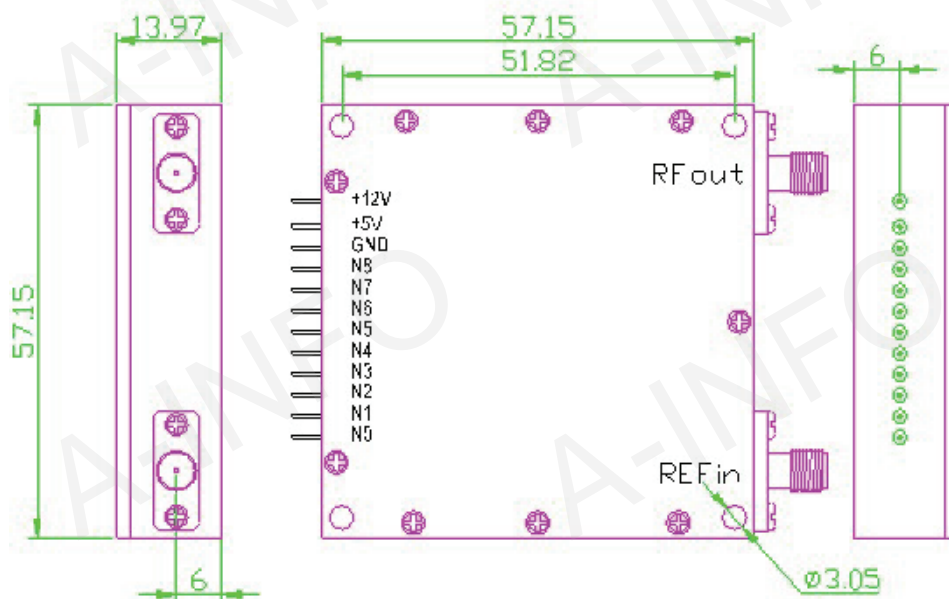


## Outline Drawing (Size: mm)



## Technical Specification

| Item                          | Technical Specification |
|-------------------------------|-------------------------|
| Frequency Range(GHz)          | 4-8                     |
| Step Size(MHz)                | 10                      |
| Power Output(dBm)             | +10                     |
| Flatness(dB)                  | ±2 max                  |
| Phase Noise(dBc/Hz) (at 4GHz) | -84 @1KHz               |
|                               | -86 @10KHz              |
|                               | -86 @100KHz             |
|                               | -105 @1MHz              |
| Phase Noise(dBc/Hz) (at 8GHz) | -84 @1KHz               |
|                               | -86 @10KHz              |
|                               | -86 @100KHz             |
|                               | -100 @1MHz              |
| Harmonics(dBc)                | -10 max                 |
| Spurious(dBc)                 | -65 max                 |
| Switching Speed(us)           | 200 max                 |
| Power Supply(V/mA)            | +5/200, +12/50 typ      |
| Reference Frequency           | External 10MHz          |
| Operating Temperature(°C)     | -40 ~ +70               |
| Control                       | in parallel Control     |
| Connectors                    | SMA-Female(moveable)    |

## Test Results

+25°C

| Frequency (MHz) | Power Output (dBm) | Spurious (dBc) | Harmonics (dBc) | Phase Noise (dBc/Hz) |        |        |         |
|-----------------|--------------------|----------------|-----------------|----------------------|--------|--------|---------|
|                 |                    |                |                 | 1KHz                 | 10KHz  | 100KHz | 1MHz    |
| 4000            | 14.33              | ≥66.00         | ≥20.00          | -89.67               | -91.00 | -87.17 | -120.00 |
| 4320            | 14.50              | ≥66.00         | ≥20.00          | -89.17               | -90.50 | -86.17 | -120.00 |
| 4770            | 14.50              | ≥66.00         | ≥20.00          | -88.67               | -90.67 | -86.83 | -120.00 |
| 5210            | 14.00              | ≥66.00         | ≥20.00          | -88.50               | -89.17 | -86.50 | -120.00 |
| 5600            | 13.87              | ≥66.00         | ≥20.00          | -88.00               | -88.67 | -86.67 | -120.00 |
| 5990            | 13.67              | ≥66.00         | ≥20.00          | -88.17               | -88.00 | -87.17 | -120.00 |
| 6230            | 13.33              | ≥66.00         | ≥20.00          | -85.83               | -86.33 | -88.50 | -120.00 |
| 6690            | 13.00              | ≥66.00         | ≥20.00          | -85.83               | -86.50 | -89.17 | -120.00 |
| 7080            | 12.17              | ≥66.00         | ≥20.00          | -85.17               | -86.17 | -90.17 | -120.00 |
| 7670            | 11.17              | ≥66.00         | ≥20.00          | -84.83               | -86.17 | -90.67 | -120.00 |
| 8000            | 10.67              | ≥66.00         | ≥20.00          | -84.33               | -86.17 | -90.83 | -120.00 |

-40°C

| Frequency (MHz) | Power Output (dBm) | Spurious (dBc) | Harmonics (dBc) | Phase Noise (dBc/Hz) |        |        |         |
|-----------------|--------------------|----------------|-----------------|----------------------|--------|--------|---------|
|                 |                    |                |                 | 1KHz                 | 10KHz  | 100KHz | 1MHz    |
| 4000            | 15.00              | ≥66.00         | ≥20.00          | -87.83               | -89.33 | -86.83 | -120.00 |
| 4320            | 14.83              | ≥66.00         | ≥20.00          | -88.00               | -89.00 | -86.67 | -120.00 |
| 4770            | 14.67              | ≥66.00         | ≥20.00          | -87.67               | -88.17 | -86.83 | -120.00 |
| 5210            | 14.67              | ≥66.00         | ≥20.00          | -87.50               | -88.50 | -87.50 | -120.00 |
| 5600            | 14.50              | ≥66.00         | ≥20.00          | -87.17               | -87.67 | -87.83 | -120.00 |
| 5990            | 14.33              | ≥66.00         | ≥20.00          | -86.50               | -86.83 | -87.50 | -120.00 |
| 6230            | 14.17              | ≥66.00         | ≥20.00          | -86.33               | -86.33 | -88.50 | -120.00 |
| 6690            | 13.83              | ≥66.00         | ≥20.00          | -85.50               | -86.83 | -89.17 | -120.00 |
| 7080            | 13.00              | ≥66.00         | ≥20.00          | -85.83               | -86.67 | -90.33 | -120.00 |
| 7670            | 12.33              | ≥66.00         | ≥20.00          | -85.50               | -86.33 | -91.83 | -120.00 |
| 8000            | 11.50              | ≥66.00         | ≥20.00          | -84.67               | -86.33 | -92.83 | -120.00 |

**+70°C**

| Frequency (MHz) | Power Output (dBm) | Spurious (dBc) | Harmonics (dBc) | Phase Noise (dBc/Hz) |        |        |         |
|-----------------|--------------------|----------------|-----------------|----------------------|--------|--------|---------|
|                 |                    |                |                 | 1KHz                 | 10KHz  | 100KHz | 1MHz    |
| 4000            | 14.00              | ≥66.00         | ≥20.00          | -88.50               | -89.17 | -86.33 | -120.00 |
| 4320            | 14.33              | ≥66.00         | ≥20.00          | -88.00               | -89.00 | -86.50 | -120.00 |
| 4770            | 14.33              | ≥66.00         | ≥20.00          | -87.83               | -88.83 | -86.50 | -120.00 |
| 5210            | 13.83              | ≥66.00         | ≥20.00          | -87.33               | -88.50 | -87.17 | -120.00 |
| 5600            | 13.67              | ≥66.00         | ≥20.00          | -86.83               | -88.50 | -87.33 | -120.00 |
| 5990            | 13.50              | ≥66.00         | ≥20.00          | -86.50               | -87.50 | -87.83 | -120.00 |
| 6230            | 13.33              | ≥66.00         | ≥20.00          | -86.17               | -87.83 | -88.33 | -120.00 |
| 6690            | 12.83              | ≥66.00         | ≥20.00          | -85.83               | -87.17 | -88.17 | -120.00 |
| 7080            | 12.00              | ≥66.00         | ≥20.00          | -85.50               | -87.00 | -88.50 | -120.00 |
| 7670            | 11.83              | ≥66.00         | ≥20.00          | -85.17               | -86.67 | -88.83 | -120.00 |
| 8000            | 10.17              | ≥66.00         | ≥20.00          | -85.00               | -86.50 | -89.50 | -120.00 |

**Port Definition**

|          |      |     |     |    |    |    |
|----------|------|-----|-----|----|----|----|
| Port     | 1    | 2   | 3   | 4  | 5  | 6  |
| Function | +12V | +5V | GND | N8 | N7 | N6 |
| Port     | 9    | 10  | 11  | 12 | 13 | 14 |
| Function | N5   | N4  | N3  | N2 | N1 | N0 |

**N0 ~ N8 controlled by TTL level**