

PRELIMINARY

Features

- High power
 - $P_o = 35$ dBm at $P_{in} = 4$ dBm
- Super low distortion
 - $P_{adj} = -67$ dBc at $P_o = 34$ dBm, 600 kHz offset
- High gain
 - $G_p = 31$ dB at $P_{in} = 4$ dBm
- Input/output port matched to 50Ω
- Hermetically sealed package

RF Performance Specifications ($T_a = 25^\circ\text{C}$)

| Characteristic | Symbol | Condition | Unit | Min. | Typ. | Max. |
|--------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|
| Output Power | P_o | $V_{DD1} = V_{DD2} = V_{DD3} = 9\text{V}$ $V_{GG} = -5\text{V}$, $f = 1.9$ GHz $P_{in} = 4$ dBm | dBm | 34 | 35 | - |
| Power Gain | G_p | | dB | 30 | 31 | - |
| Drain Current | I_{DD}^* | | A | - | 1.5 | 1.9 |
| Adjacent Channel Leakage Power | P_{adj} | $V_{DD1} = V_{DD2} = V_{DD3} = 9\text{V}$ $V_{GG} = -5\text{V}$, $f = 1.9$ GHz $P_o = 34$ dBm $\pi / 4$ -QPSK Modulation 600 kHz Offset | dBc | - | -67 | -65 |

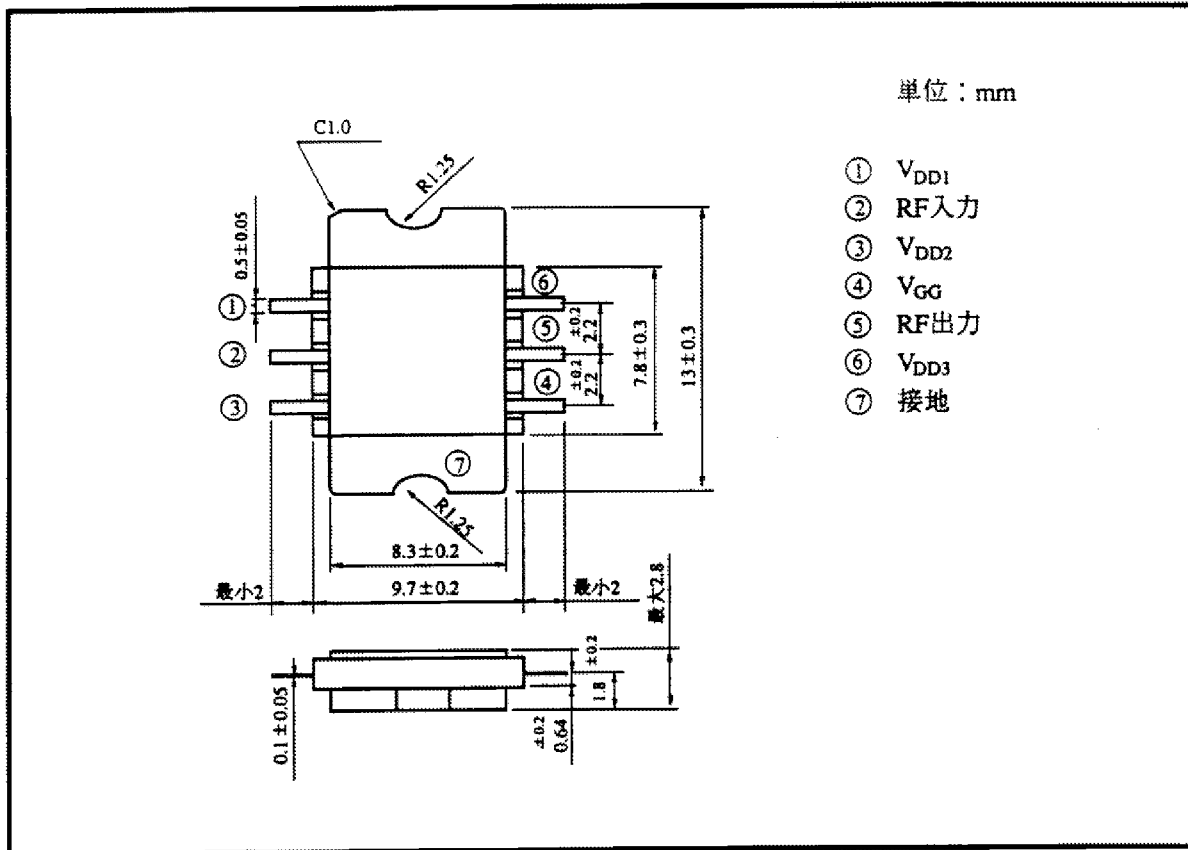
* $I_{DD} = I_{DD1} + I_{DD2} + I_{DD3}$

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Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

| Characteristic | Symbol | Unit | Rating |
|----------------------|-----------------------------|------------------|------------|
| Drain Supply Voltage | $V_{DD1}, V_{DD2}, V_{DD3}$ | V | 15 |
| Gate Supply Voltage | V_{GG} | V | -15 |
| Input Power | P_{in} | dBm | 13 |
| Flange Temperature | T_f | $^\circ\text{C}$ | -30 ~ +80 |
| Storage Temperature | T_{stg} | $^\circ\text{C}$ | -65 ~ +175 |

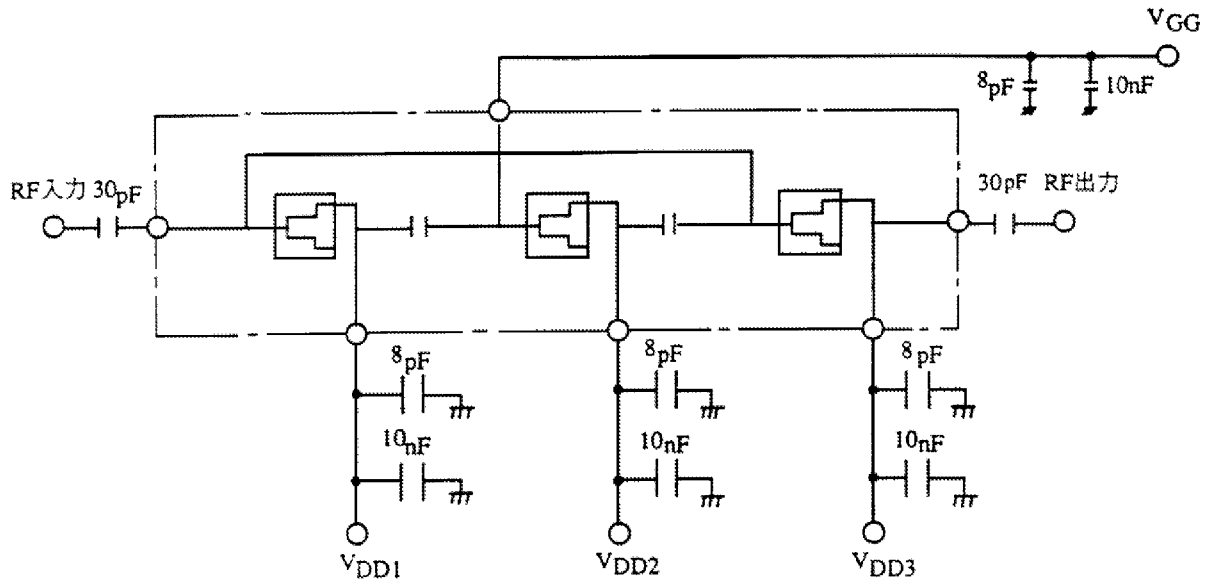
Package Outline (2-8N1B)



Handling Precautions for Packaged Type

Soldering iron should be grounded and the operating time should not exceed 10 seconds at 260°C .

MMIC Schematic



RF Performance

