



- PIN:
- ① P<sub>in</sub> : RF INPUT
  - ② V<sub>CC1</sub>: 1st. DC SUPPLY
  - ③ V<sub>CC2</sub>: 2nd. DC SUPPLY
  - ④ V<sub>CC3</sub>: 3rd. DC SUPPLY
  - ⑤ P<sub>o</sub> : RF OUTPUT
  - ⑥ GND: FIN

**ABSOLUTE MAXIMUM RATINGS** (T<sub>c</sub>=25°C unless otherwise noted)

| Symbol                | Parameter                  | Conditions   | Ratings     | Unit |
|-----------------------|----------------------------|--|-------------|------|
| V <sub>CC</sub>       | Supply voltage             | Z <sub>G</sub> =Z <sub>L</sub> =50Ω                          | 17          | V    |
| I <sub>CC</sub>       | Total current              | Z <sub>G</sub> =Z <sub>L</sub> =50Ω                          | 15          | A    |
| P <sub>in</sub> (max) | Input power                | Z <sub>G</sub> =Z <sub>L</sub> =50Ω, V <sub>CC1</sub> ≤12.5V | 600         | mW   |
| P <sub>o</sub> (max)  | Output power               | Z <sub>G</sub> =Z <sub>L</sub> =50Ω, V <sub>CC1</sub> ≤12.5V | 60          | W    |
| T <sub>c</sub> (OP)   | Operation case temperature | Z <sub>G</sub> =Z <sub>L</sub> =50Ω, V <sub>CC1</sub> ≤12.5V | -30 to +110 | °C   |
| T <sub>stg</sub>      | Storage temperature        |  | -40 to +110 | °C   |

Note. Above parameters are guaranteed independently.

**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub>=25°C unless otherwise noted)

| Symbol          | Parameter           | Test conditions  | Limits                    |     | Unit |
|-----------------|---------------------|--|---------------------------|-----|------|
|                 |                     |  | Min                       | Max |      |
| f               | Frequency range     |  | 400                       | 450 | MHz  |
| P <sub>o</sub>  | Output power        |  | 45                        |     | W    |
| η <sub>T</sub>  | Total efficiency    |  | 35                        |     | %    |
| 2f <sub>o</sub> | 2nd. harmonic       | V <sub>CC</sub> =12.5V, P <sub>in</sub> =300mW, Z <sub>G</sub> =Z <sub>L</sub> =50Ω  |                           | -30 | dBc  |
| 3f <sub>o</sub> | 3rd. harmonic       |  |                           | -30 | dBc  |
| ρ <sub>in</sub> | Input VSWR          |  |                           | 2.8 | -    |
| -               | Load VSWR tolerance | V <sub>CC</sub> =15.2V, P <sub>o</sub> =45W(P <sub>in</sub> :controlled)<br>Z <sub>G</sub> =50Ω, Load VSWR=8:1 (All phase) | No degradation or destroy |     | -    |

Note. Above parameters, ratings, limits and test conditions are subject to change.