



- PIN :
- ① Pin : RF INPUT
  - ② V<sub>BB</sub> : BASE BIAS SUPPLY
  - ③ V<sub>CC1</sub> : 1st. DC SUPPLY
  - ④ V<sub>CC2</sub> : 2nd. DC SUPPLY
  - ⑤ Po : RF OUTPUT
  - ⑥ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>CC1</sub>	1st. DC supply		6	V
V <sub>CC2</sub>	2nd. DC supply		15	V
V <sub>BB</sub>	Base bias		6	V
I <sub>CC</sub>	Total current		3	A
P <sub>in(max)</sub>	Input power	V <sub>CC1</sub> ≤ 5V, V <sub>BB</sub> = 5V, Z <sub>G</sub> = Z <sub>L</sub> = 50Ω	20	mW
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50Ω	2.5	W
T <sub>C(OP)</sub>	Operation case temperature		- 30 to 100	°C
T <sub>stg</sub>	Storage temperature		- 40 to 100	°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	V <sub>CC1</sub> = 5V	1.24	1.3	GHz
P <sub>o</sub>	Output power	V <sub>BB</sub> = 5V	1.4		W
η <sub>T</sub>	Total efficiency	V <sub>CC2</sub> = 7.2V	25		%
2f <sub>o</sub>	2nd. harmonic	P <sub>in</sub> = 10mW		- 28	dBc
ρ <sub>in</sub>	Input VSWR	Z <sub>G</sub> = Z <sub>L</sub> = 50Ω		3.5	-
-	Load VSWR tolerance	V <sub>BB</sub> = 5V, V <sub>CC2</sub> = 15V, P <sub>in</sub> = 10mW P <sub>o</sub> = 1.4W (V <sub>CC1</sub> : controlled), Load VSWR = 10:1 (All phase), 5sec. Z <sub>G</sub> = 50Ω	No degradation or destroy		-

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