TOSHIBA

MICROWAVE SEMICONDUCTOR

TECHNICAL DATA

MICROWAVE POWER MMIC AMPLIFIER TMD1414-2C

FEATURES

n HIGH POWER

P1dB=34.5dBm at 13.75GHz to 14.5GHz

n HIGH GAIN G1dB=26.0dB at 13.75GHz to 14.5GHz

n BROAD BAND INTERNALLY MATCHED

n HERMETICALLY SEALED PACKAGE

ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

| CHARACTERISTICS | SYMBOL | UNIT | RATING |
|----------------------|--------|------|------------|
| Drain Supply Voltage | VDD | V | 10 |
| Gate Supply Voltage | VGG | V | -10 |
| Input Power | Pin | dBm | 20 |
| Flange Temperature | Tf | °C | -40 ~ +90 |
| Storage Temperature | Tstg | ٥C | -65 ~ +175 |

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

| CHARACTERISTICS | SYMBOL | CONDITIONS | UNIT | MIN. | TYP. | MAX. |
|--------------------------|--------------|------------|------|-------|------|------|
| Operating Frequency | f | | GHz | 13.75 | | 14.5 |
| Output Power at 1dB Gain | P1dB | | dBm | 32.0 | 34.5 | _ |
| Compression Point | | | | | | |
| 1dB Gain Compression | G1dB | | dB | 21.0 | 26.0 | |
| Point | | VDD=7V | | | | |
| Gain Flatness | ΔG | VGG=-5V | dB | | _ | ±1.0 |
| Drain Current | IDD | | Α | | 1.4 | 1.8 |
| Power Added Efficiency | <i>h</i> add | | % | | 29 | |

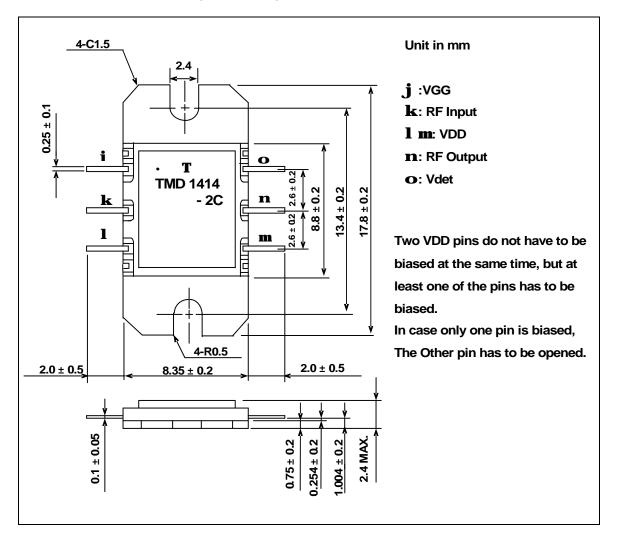
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TOSHIBA CORPORATION

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PACKAGE OUTLINE (7-BA15A)



Recommended Bias Configuration

