TOSHIBA

MICROWAVE SEMICONDUCTOR TECHNICAL DATA

MICROWAVE POWER MMIC AMPLIFIER TMD0305-2

FEATURES

- HIGH POWER
 P1dB=33.0dBm at 3.4GHz to 5.1GHz
- HIGH GAIN
 G1dB=22.0dB at 3.4GHz to 5.1GHz
- BROAD BAND INTERNALLY MATCHED
- HERMETICALLY SEALED PACKAGE

ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

| CHARACTERISTICS | SYMBOL | UNIT | RATING |
|----------------------|--------|------|--------------------|
| Drain Supply Voltage | VDD | V | 15 |
| Gate Supply Voltage | VGG | V | -10 |
| Input Power | Pin | dBm | 25 |
| Flange Temperature | Tf | °C | -30 ~ + 80 |
| Storage Temperature | Tstg | °C | -65 ~ + 175 |

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

| CHARACTERISTICS | SYMBOL | CONDITIONS | UNIT | MIN. | TYP. | MAX. |
|--------------------------|--------|------------------|------|------|------|------|
| Output Power at 1dB Gain | P1dB | | dBm | 32.0 | 33.0 | |
| Compression Point | | VDD1=VDD2=VDD3 | | | | |
| Power Gain at 1dB Gain | G1dB | = 10V | dB | 20.0 | 22.0 | |
| Compression Point | | VGG= -5V | | | | |
| Drain Current* | IDD | | Α | | 1.6 | 1.9 |
| Input VSWR | VSWRin | f = 3.4 - 5.1GHz | | | _ | 3.0 |
| | | | | | | |

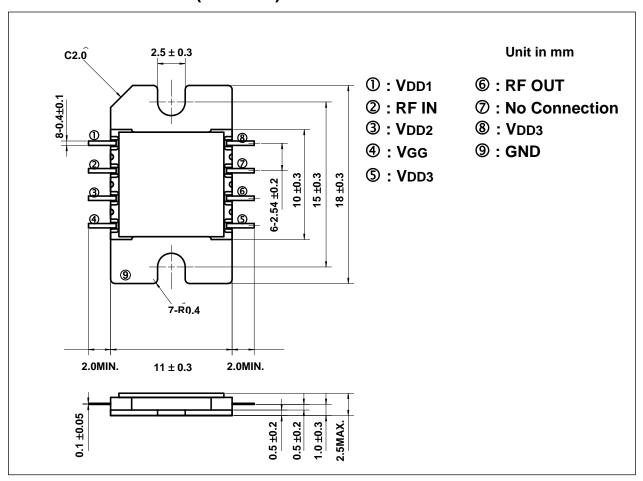
^{*} IDD = IDD1 + IDD2 + IDD3

TOSHIBA CORPORATION

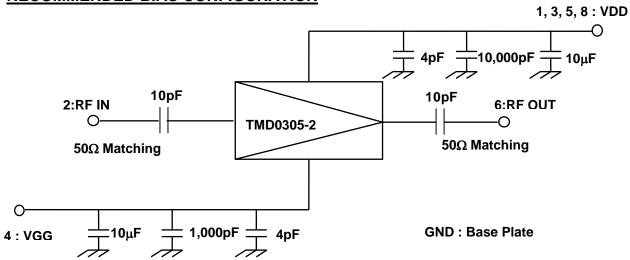
[◆]The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA for any infringements of patents or other rights of the third parties which may results from its use, No license is granted by implication or otherwise under any patent or patent rights of TOSHIBA or others.

The information contained herein is subject to change without prior notice. It is therefor advisable to contact TOSHIBA before proceeding with design of equipment incorporating this product.

PACKAGE OUTLINE (2-11E1A)



RECOMMENDED BIAS CONFIGURATION



HANDLING PRECAUTIONS FOR PACKAGE MODEL

Soldering iron should be grounded and the operating time should not exceed 10 seconds at 260°C. Flanges of devices should be attached using screws and washers. Recommended torque is 0.18-0.20 N·m.