TOSHIBA

MICROWAVE SEMICONDUCTOR

TECHNICAL DATA

FEATURES

HIGH POWER

P1dB=33.0dBm at 3.4GHz to 5.1GHz

HIGH GAIN

G1dB=22.0dB at 3.4GHz to 5.1GHz

MICROWAVE POWER MMIC AMPLIFIER TMD0305-2

■ 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= $25^{\circ}C$)

| 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 | | А | | 1.6 | 1.9 |
| Input VSWR | VSWRin | f = 3.4 – 5.1GHz | | | | 3.0 |
| | | | | | | |

* IDD = IDD1 + IDD2 + IDD3

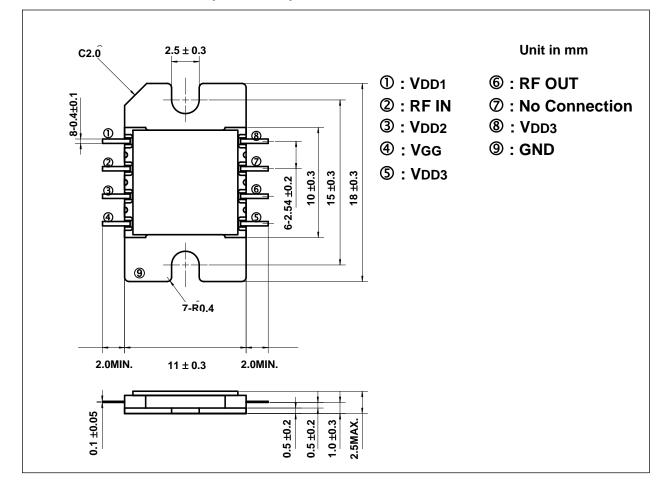
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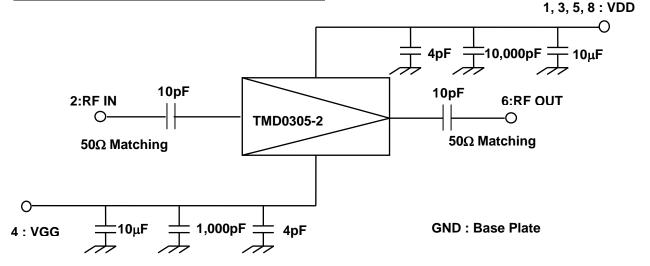
TOSHIBA CORPORATION

TMD0305-2

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.