

TOSHIBA
MICROWAVE SEMICONDUCTOR
TECHNICAL DATA

MICROWAVE POWER MMIC AMPLIFIER
TMD7185-2

FEATURES

- n **HIGH POWER**
 P1dB=33.0dBm at 7.1GHz to 8.5GHz
- n **HIGH GAIN**
 G1dB=28.0dB at 7.1GHz to 8.5GHz
- n **BROAD BAND INTERNALLY MATCHED**
- n **HERMETICALLY SEALED PACKAGE**

ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

| CHARACTERISTICS | SYMBOL | UNIT | RATING |
|----------------------|--------|------|------------|
| Drain Supply Voltage | VDD | V | 15 |
| Gate Supply Voltage | VGG | V | -10 |
| Input Power | Pin | dBm | 10 |
| 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 Compression Point | P1dB | VDD= 10V VGG= -5V f = 7.1 – 8.5GHz | dBm | 32.0 | 33.0 | — |
| Power Gain at 1dB Gain Compression Point | G1dB | | dB | 27.0 | 28.0 | — |
| Drain Current | IDD | | A | — | 1.4 | 1.7 |
| Input VSWR | VSWRin | | — | — | — | 3.0 |
| 3 rd Order Intermodulation Distortion | IM ₃ | | Po (S.C.L.)=22.0 dBm | dBc | -42 | -45 |

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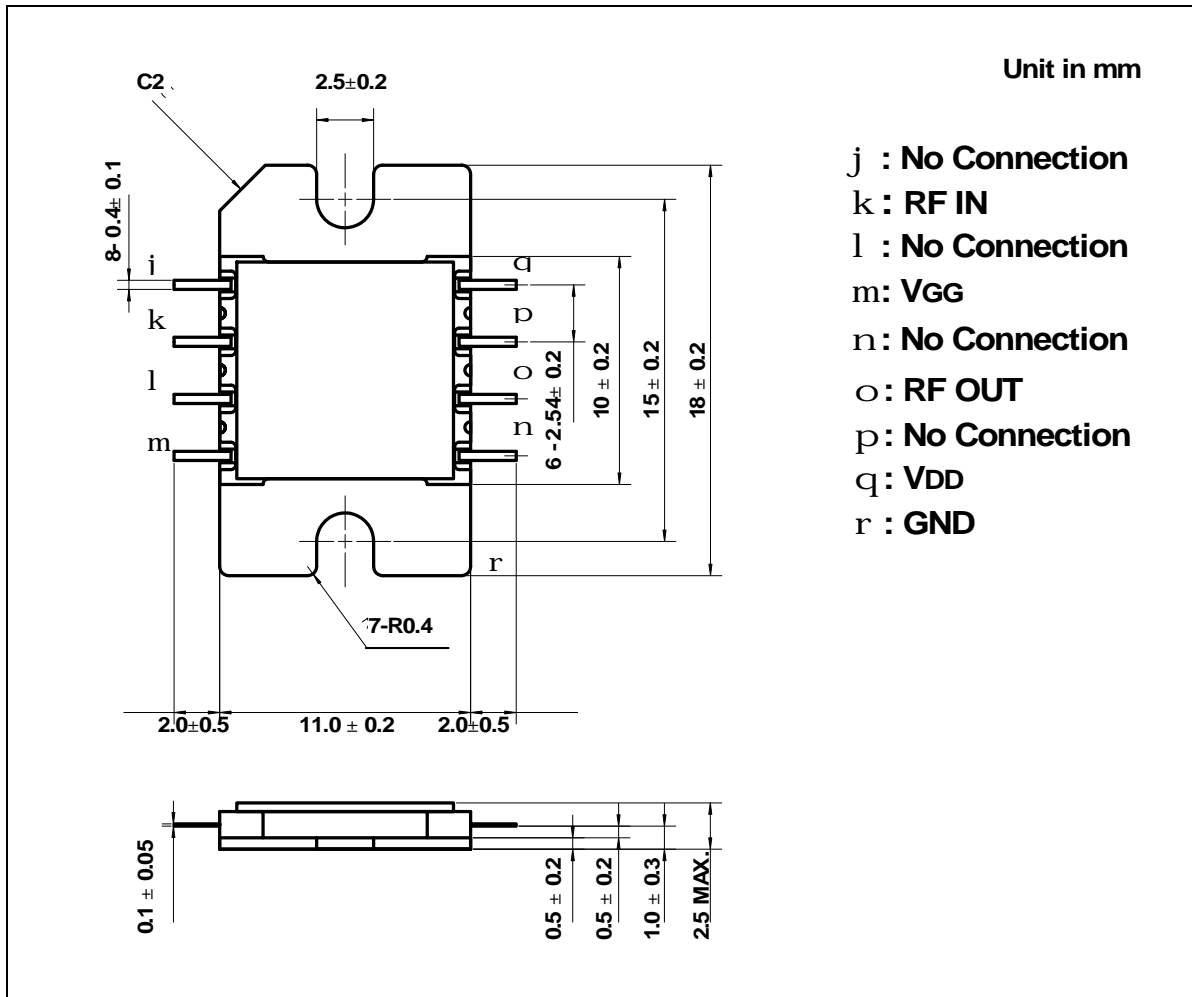
The information contained herein is subject to change without prior notice. It is therefor advisable to contact TOSHIBA before proceeding with design of equipment incorporating this product.

TOSHIBA CORPORATION

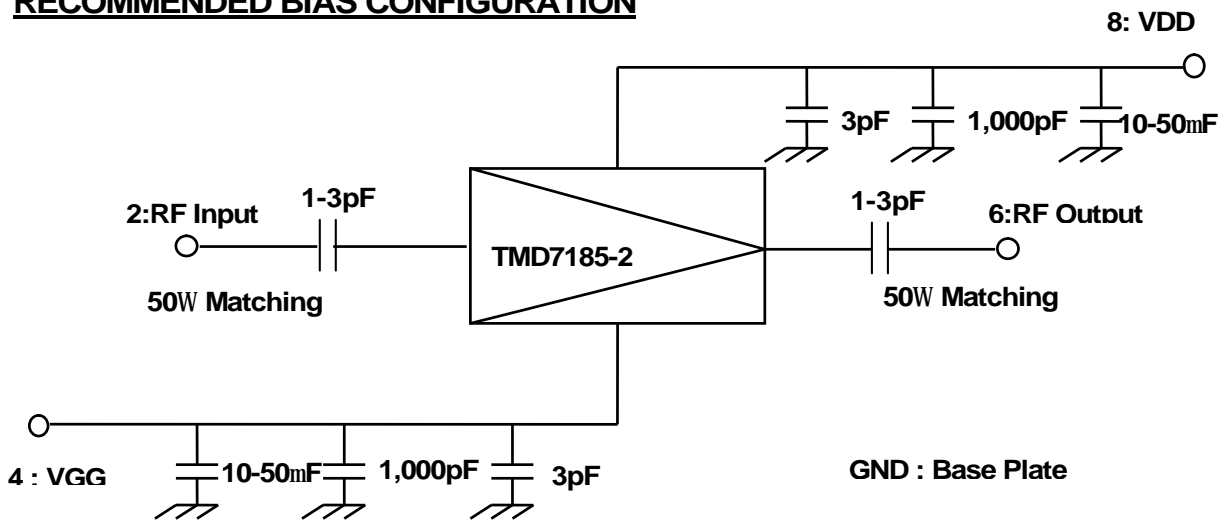
Rev. Mar.2006



PACKAGE OUTLINE (2-11E1B)



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.