

# 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 **BROAD BAND INTERNALLY MATCHED**
- n **HIGH GAIN**  
G1dB=28.0dB at 7.1GHz to 8.5GHz
- 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 <sup>rd</sup> Order Intermodulation Distortion	IM <sub>3</sub>		Po (S.C.L.)=22.0 dBm	dBc	-42	-45

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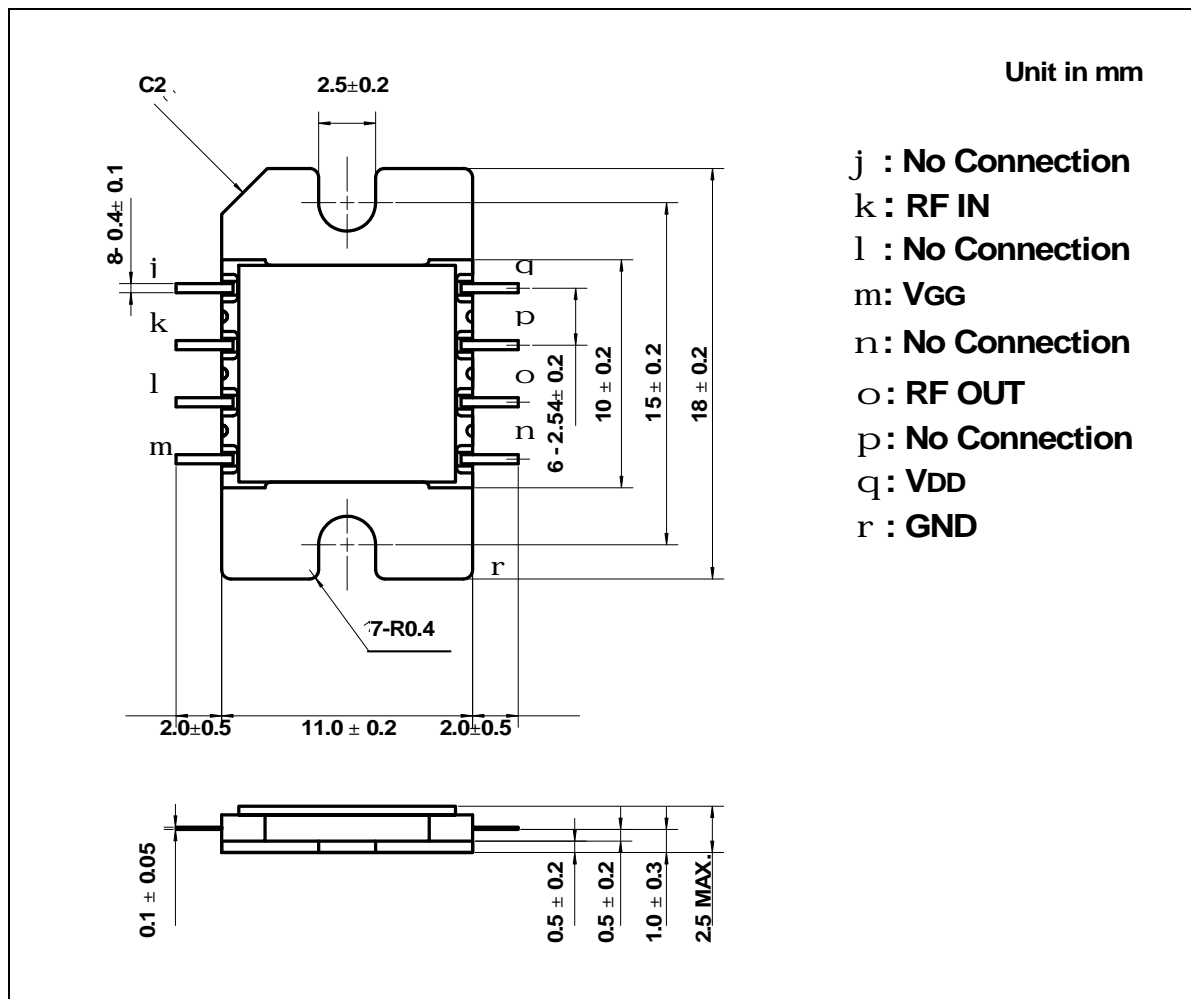
The information contained herein is subject to change without prior notice. It is therefor advisable to contact TOSHIBA before proceeding with design of equipment incorporating this product.

**TOSHIBA CORPORATION**

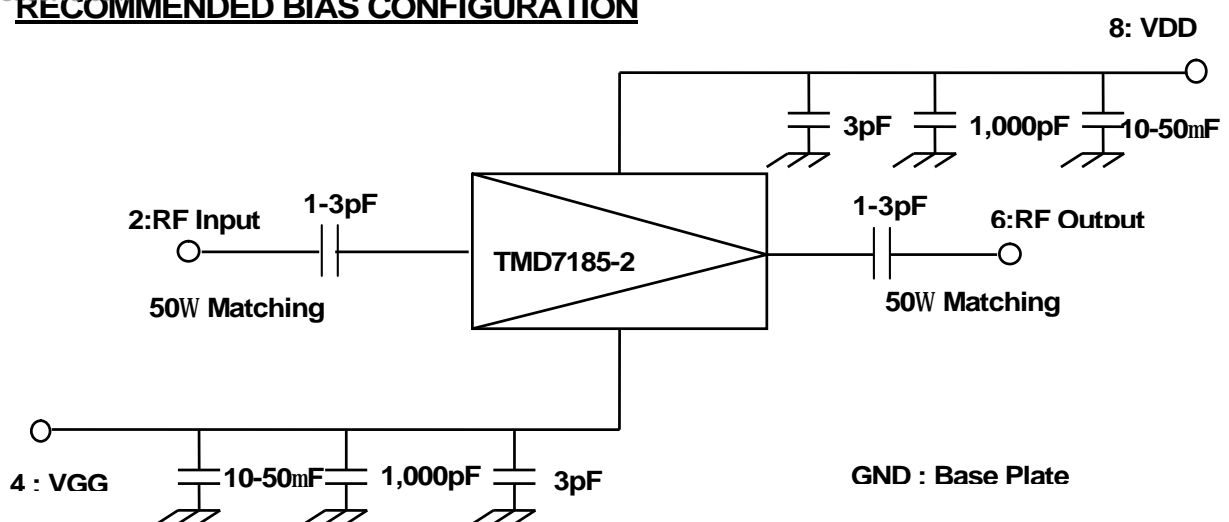
Rev. Mar.2006

TMD7185-2

**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.