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**

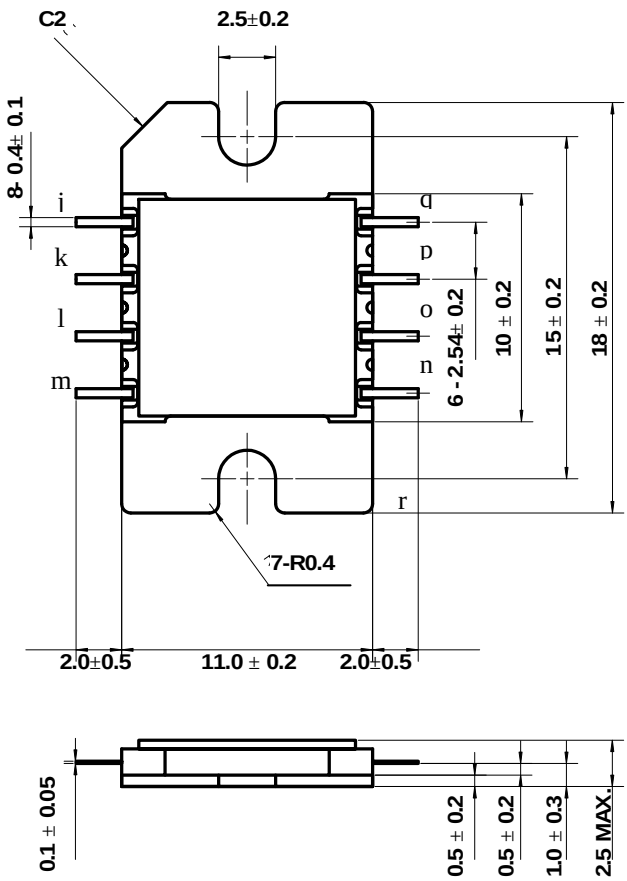
ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

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	T_{stg}	°C	-65 ~ +175

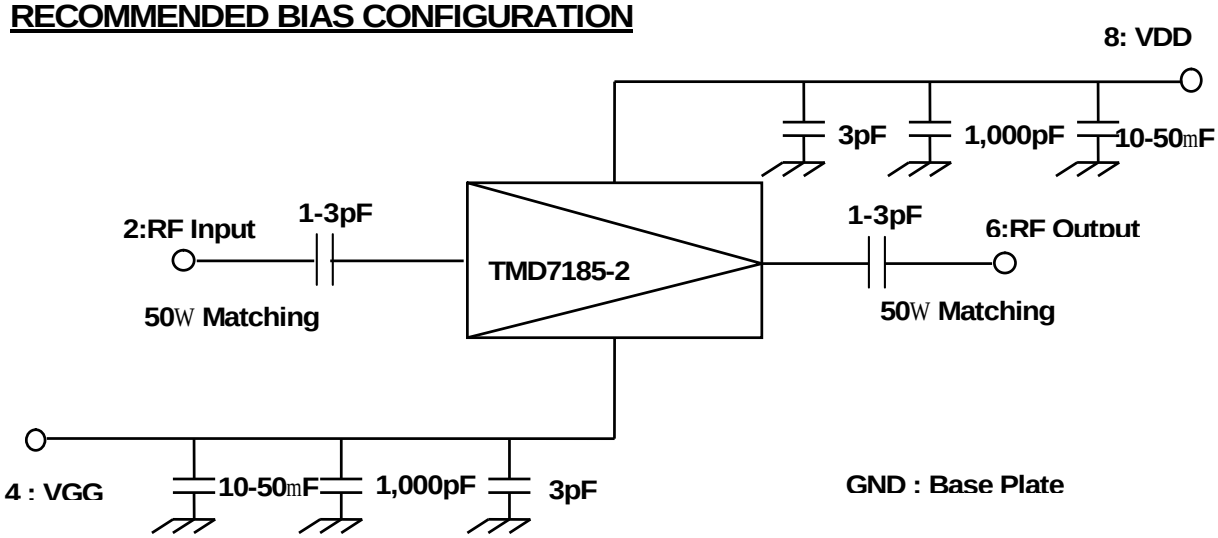
RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB Gain Compression Point	P_{1dB}	VDD= 10V VGG= -5V f = 7.1 – 8.5GHz	dBm	32.0	33.0	—
Power Gain at 1dB Gain Compression Point	G_{1dB}		dB	27.0	28.0	—
Drain Current	IDD		A	—	1.4	1.7
Input VSWR	VSWRin		—	—	—	3.0
3rd Order Intermodulation Distortion	IM_3	Po (S.C.L.)=22.0 dBm	dBc	-42	-45	—

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.