# TOSHIBA

MICROWAVE SEMICONDUCTOR

## TECHNICAL DATA

## MICROWAVE POWER MMIC AMPLIFIER TMD0507-2A

## **FEATURES**

## HIGH POWER P1dB=33.0dBm at 5.1GHz to 7.2GHz

■ HIGH GAIN G1dB=22.0dB at 5.1GHz to 7.2GHz

#### ■ 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	20
Flange Temperature	Tf	°C	-30 ~ +80
Storage Temperature	Tstg	٥C	-65 ~ +175

## **RF PERFORMANCE SPECIFICATIONS** (Ta= $25^{\circ}C$ )

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB	P1dB		dBm	32.0	33.0	
Compression Point		VDD1=VDD2=VDD3				
Power Gain at 1dB	G1dB	= 10V	dB	20.0	22.0	
Compression Point		VGG= -5V				
Gain Flatness (1)*	∆G1		dB			±2.0
Gain Flatness (2)**	∆G2	f = 5.1 – 7.2GHz	dB			±1.5
Drain Current***	IDD		А		1.7	2.0
Input VSWR	VSWRin					3.0

\*  $\Delta G1$  at f = 5.1 – 7.2 GHz

\*\*  $\Delta$ G2 at f = 5.9 - 7.2GHz

\*\*\* IDD = IDD1 + IDD2 + IDD3

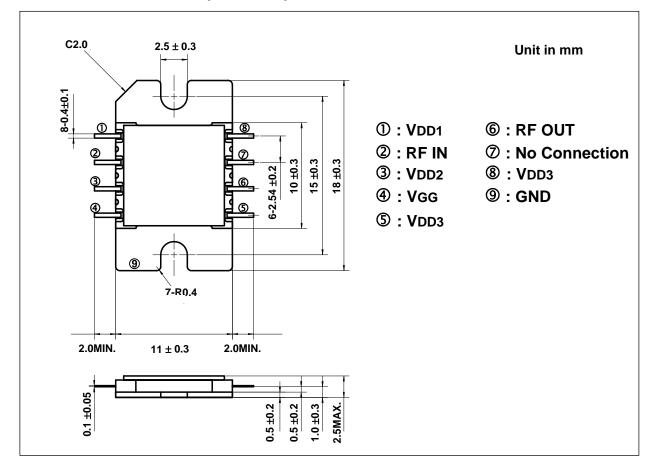
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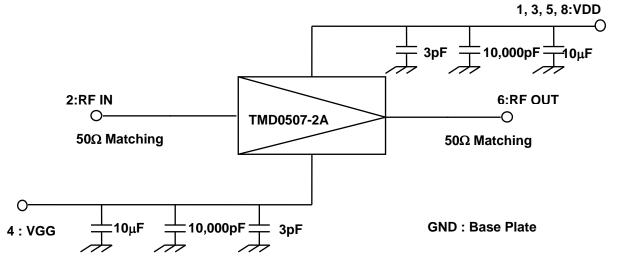
The information contained herein is subject to change without prior notice. It is therefor advisable to contact TOSHIBA before proceeding with design of equipment incorporating this product.

TMD0507-2A -

#### **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.