# TOSHIBA

MICROWAVE SEMICONDUCTOR

TECHNICAL DATA

# MICROWAVE POWER MMIC AMPLIFIER TMD1414-2C

## FEATURES

#### n HIGH POWER

P1dB=34.5dBm at 13.75GHz to 14.5GHz

n HIGH GAIN G1dB=26.0dB at 13.75GHz to 14.5GHz

#### **n** BROAD BAND INTERNALLY MATCHED

#### n HERMETICALLY SEALED PACKAGE

# ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain Supply Voltage	VDD	V	10
Gate Supply Voltage	VGG	V	-10
Input Power	Pin	dBm	20
Flange Temperature	Tf	°C	-40 ~ +90
Storage Temperature	Tstg	٥C	-65 ~ +175

# RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Operating Frequency	f		GHz	13.75		14.5
Output Power at 1dB Gain	P1dB		dBm	32.0	34.5	_
Compression Point						
1dB Gain Compression	G1dB		dB	21.0	26.0	
Point		VDD=7V				
Gain Flatness	ΔG	VGG=-5V	dB		_	±1.0
Drain Current	IDD		Α		1.4	1.8
Power Added Efficiency	<i>h</i> add		%		29	

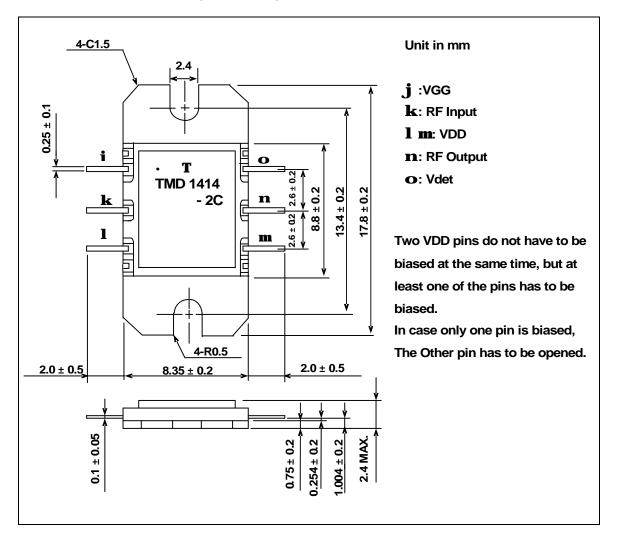
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TOSHIBA CORPORATION

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### PACKAGE OUTLINE (7-BA15A)



**Recommended Bias Configuration** 

