

# TOSHIBA

## MICROWAVE SEMICONDUCTOR TECHNICAL DATA

### MICROWAVE POWER GaAs MMIC

### TMD0507-2A

#### FEATURES

- High Power  
P1dB=33dBm at 5.1 to 7.2GHz
- High Gain  
G1dB=22dB at 5.1 to 7.2GHz
- Broadband Internally Matched
- Hermetically Sealed Package

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATINGS
DRAIN SUPPLY VOLTAGE	VDD	V	15
GATE SUPPLY VOLTAGE	VGG	V	-10
INPUT POWER	Pin	W	0.3
FLANGE TEMPERATURE	Tf	°C	-30 - +80
STORAGE TEMPERATURE	Tstg	°C	-65+ - +175

#### RF PERFORMANCE SPECIFICATIONS (Ta=25 °C)

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB	P1dB	VDD1=VDD2 =VDD3=10V Vgg=-5V F=5.1 - 7.2 GHz	dBm	32.0	33.0	—
Gain Compression Point			dB	20.0	22.0	—
Power Gain at 1dB	G1dB		dB	—	—	+/-1.5
Gain Compression Point			dB	—	—	+/-2.0
Gain Flatness (1)*	ΔG1		A	—	1.60	1.90
Gain Flatness (2)**	ΔG2		—	—	—	3.0
Drain Current ***	IDD					
VSWRin(small signal)	VSWRin					

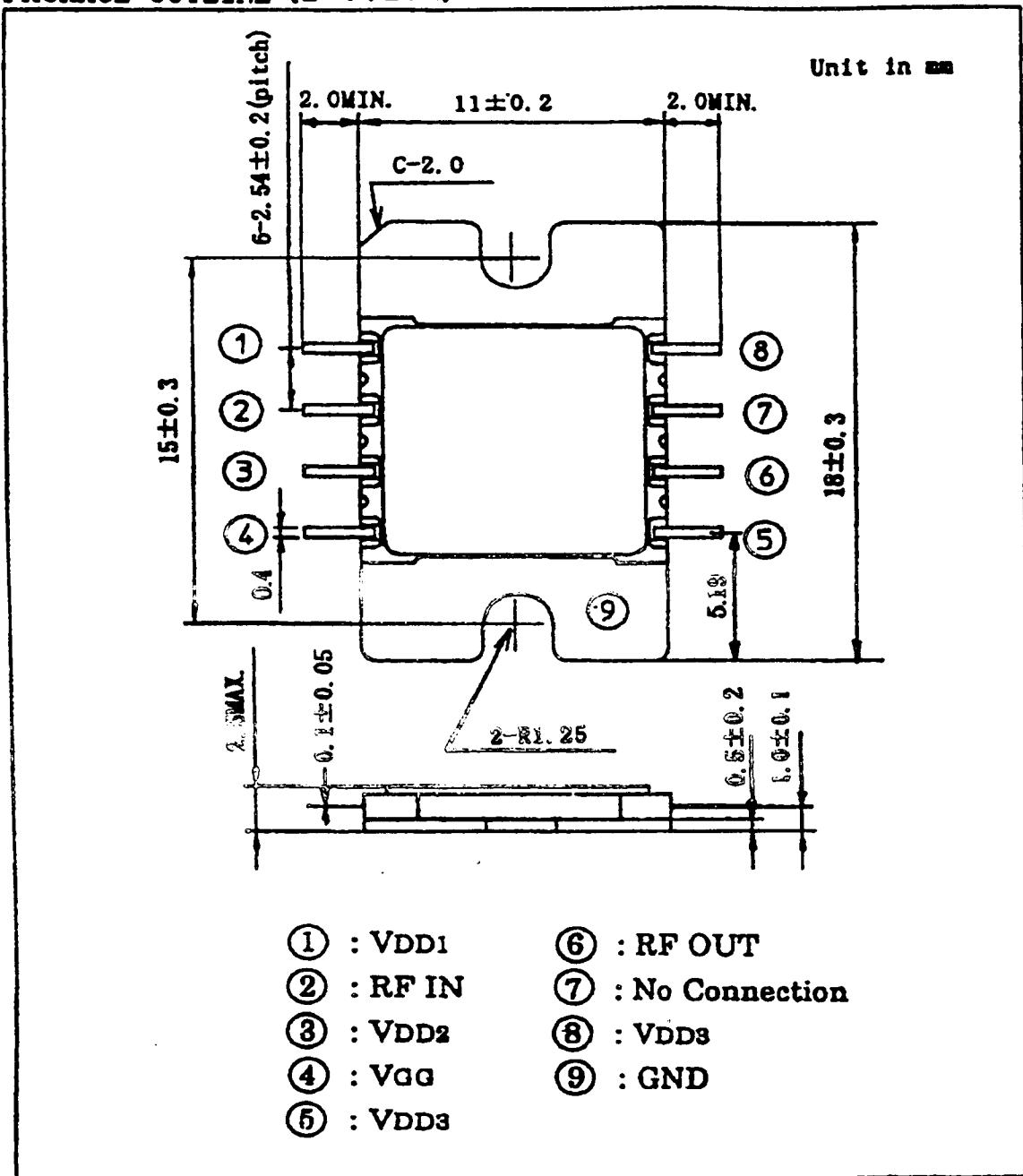
\*ΔG at f=5.9 - 7.2GHz

\*\*ΔG at f=5.1 - 7.2GHz

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

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## PACKAGE OUTLINE (2-11E1A)

HANDLING PRECAUTIONS FOR PACKAGED TYPE

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 torques are 0.18-0.20 N·m.