

# TOSHIBA

## MICROWAVE SEMICONDUCTOR TECHNICAL DATA

## POWER GaAs MMIC

### TMD0305-2

#### Features:

■ HIGH POWER

$P_{1dB} = 33$  dBm at 3.4 to 5.1 GHz

■ HIGH GAIN

$G_{1dB} = 22$  dB at 3.4 to 5.1 GHz

■ BROAD BAND INTERNALLY MATCHED

■ HERMETICALLY SEALED PACKAGE

#### ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

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 CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1 dB Gain Compression Point	$P_{1dB}$	VDD1=VDD2=VDD3= 10V,	dBm	32.0	33.0	—
Power Gain at 1 dB Gain Compression Point	$G_{1dB}$	VGG=-5 V f= 3.4-5.1 GHz	dB	20.0	22.0	—
Drain Current	IDD *		A	—	1.60	1.90
Input VSWR	VSWRi		—	—	—	3.0

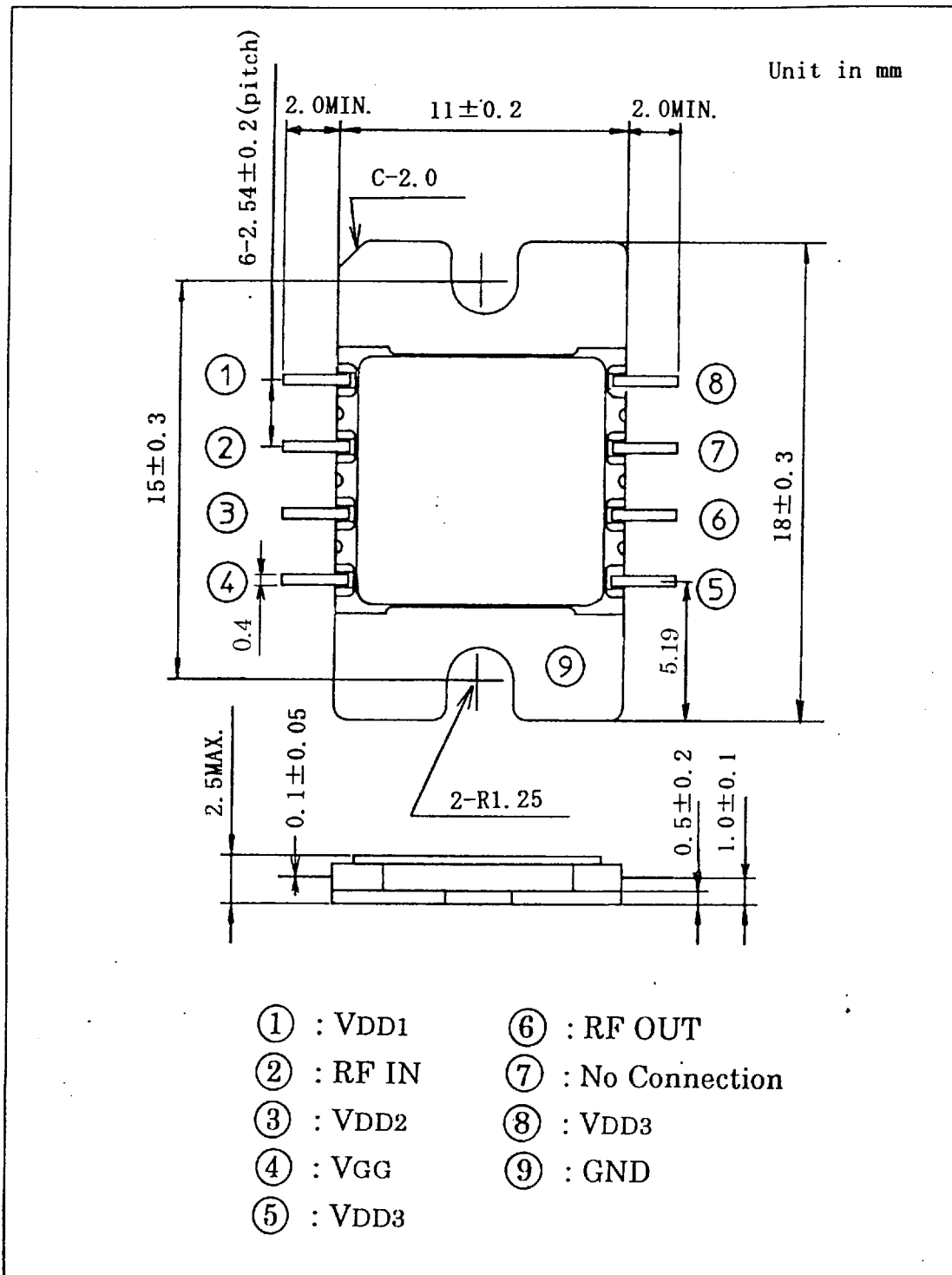
\*  $IDD = IDD1 + IDD2 + IDD3$

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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.