

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	°C	-65 ~ +175

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB Compression Point	P1dB	VDD1=VDD2=VDD3 = 10V VGG= -5V f = 5.1 – 7.2GHz	dBm	32.0	33.0	—
Power Gain at 1dB Compression Point	G1dB		dB	20.0	22.0	—
Gain Flatness (1)*	ΔG1		dB	—	—	±2.0
Gain Flatness (2)**	ΔG2		dB	—	—	±1.5
Drain Current***	IDD		A	—	1.7	2.0
Input VSWR	VSWRin		—	—	—	3.0

* ΔG1 at f = 5.1 – 7.2GHz

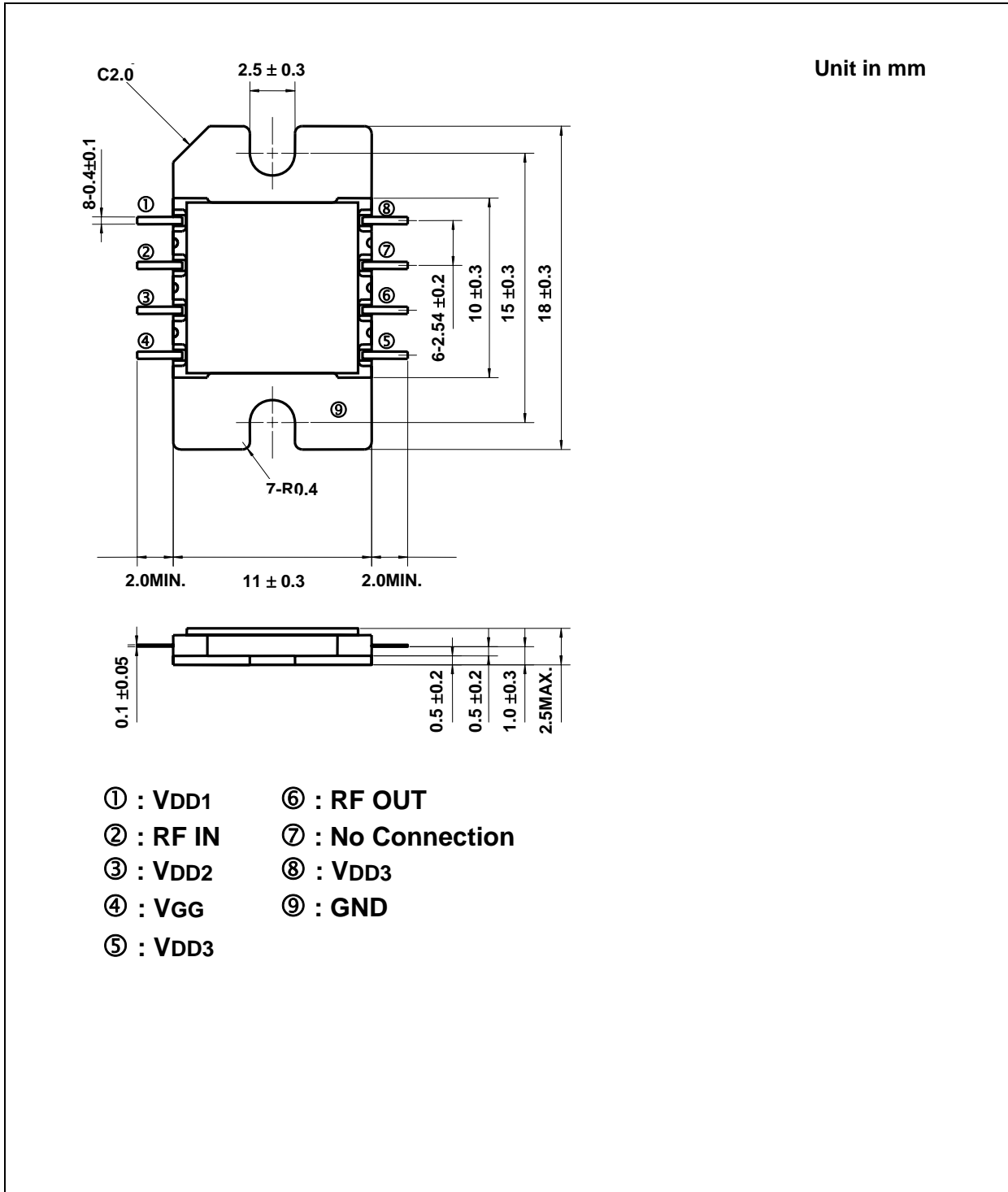
** ΔG2 at f = 5.9 – 7.2GHz

*** IDD = IDD1 + IDD2 + IDD3

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PACKAGE OUTLINE (2-11E1A)



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.