TOSHIBA

MICROWAVE POWER GaAs MMIC

TMD0507-2A

MICROWAVE SEMICONDUCTOR TECHNICAL DATA

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)

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CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.			
Output Power at 1dB	P1dB		dBm	32.0	33.0	_			
Gain Compression Point		VDD1=VDD2							
Power Gain at 1dB	G1dB	=VDD3=10V	dB	20.0	22.0	_			
Gain Compression Point		Vgg=-5V							
Gain Flatness (1)*	∆G1	F=5.1 – 7.2 GHz	dB			+/-1.5			
Gain Flatness (2)**	∆G2		dB	_	-	+/-2.0			
Drain Current ***	IDD		A	_	1.60	1.90			
VSWRin(small signal)	VSWRin				_	3.0			

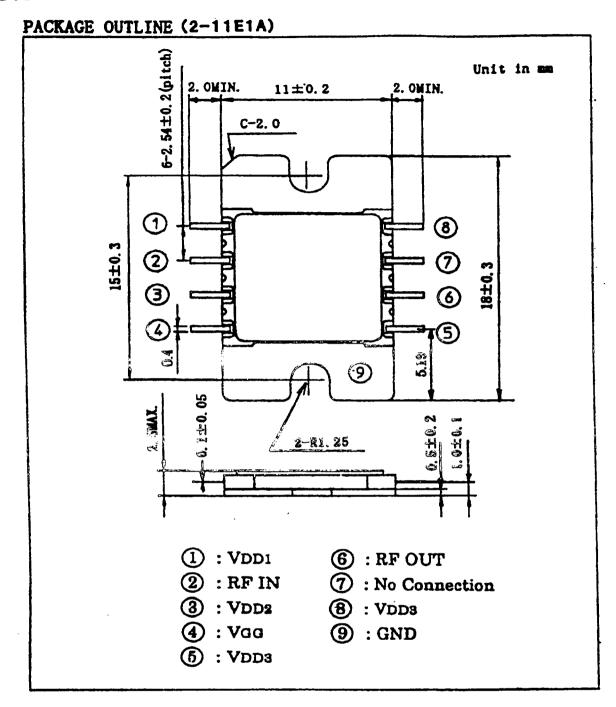
^{*∆}G at f=5.9 - 7.2GHz

^{**∆}G at f=5.1 - 7.2GHz

^{***}IDD=IDD1+IDD2+IDD3

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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.