TOSHIBA

MICROWAVE SEMICONDUCTOR
TECHNICAL DATA

MICROWAVE POWER MMIC AMPLIFIER

TMD5872-2-321

FEATURES

- Suitable for VSAT, UNII radio applications
- High Power P1dB=31.7dBm(MIN.)
- High Gain G1dB=26.7dB(MIN.)
- High Power Added Efficiency ηadd=21%(TYP.)
- Broadband Operation f=5.8-6.475GHz.

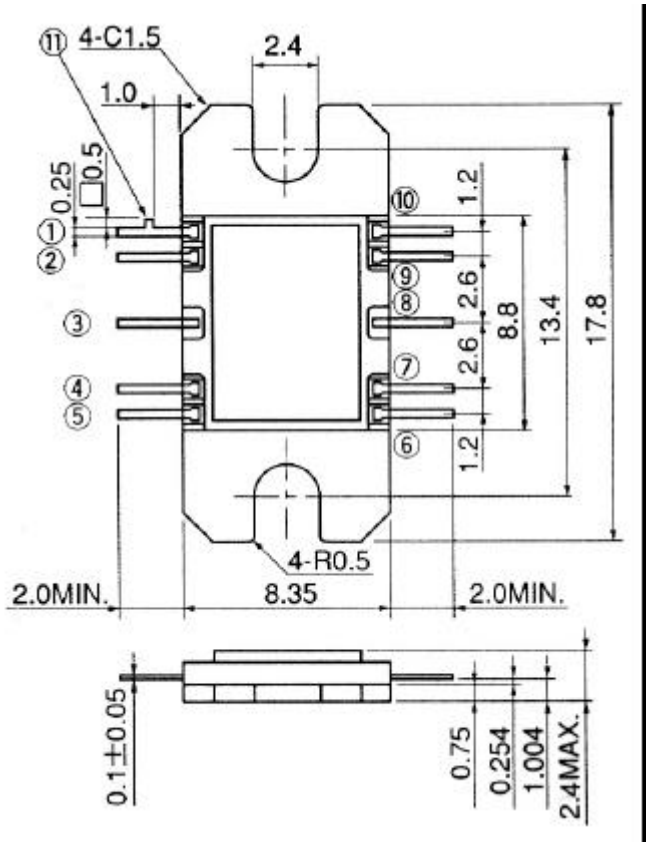
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATINGS
DRAIN SUPPLY VOLTAGE	VDD	V	15
GATE SUPPLY VOLTAGE	VGG	V	-10
INPUT POWER	Pin	dBm	10
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.
Operaing Frequency	f	VDD=10V VGG=-5V	GHz	5.8	–	6.475
Output Power at 1dB Gain Compression Point	P1dB		dBm	31.7	–	–
Power Gain at 1dB Gain Compression Point	G1dB		dB	26.7	–	–
Gain Flatness	ΔG		dB	–	–	+/- 2.0
Drain Current	IDD		A	–	1.2	1.6
Power Added Efficiency	ηadd		%	–	21	–
VSWRin (small signal)	VSWRin		–	–	2.0:1	3.0:1

Package Outline



Unit in mm

①④⑤⑥⑨⑩: No Connection
③: RF Input
②: VGG
⑦: VDD
⑧: RF Output
11pin: Orientation Tab

Recommended Bias Configuration