

FEATURES

■ **HIGH POWER**

P1dB=36.0dBm at 5.9GHz to 6.75GHz

■ **BROAD BAND INTERNALLY MATCHED**

■ **HERMETICALLY SEALED PACKAGE**

■ **HIGH GAIN**

G1dB=8.0dB at 5.9GHz to 6.75GHz

RF PERFORMANCE SPECIFICATIONS (Ta= 25° C)

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB Compression Point	P1dB	VDS= 10V f= 5.9 to 6.75GHz	dBm	35.5	36.5	—
Power Gain at 1dB Compression Point	G1dB		dB	8.0	—	—
Drain Current	IDS1		A	—	1.1	1.3
Gain Flatness	ΔG		dB	—	—	±0.6
Power Added Efficiency	η _{add}		%	—	32	—
3 rd Order Intermodulation Distortion	IM3	NOTE	dBc	-42	-45	—
Drain Current	IDS2		A	—	1.1	1.3
Channel Temperature Rise	ΔT _{ch}	VDS X IDS X R _{th(c-c)}	°C	—	—	80

NOTE : Two Tone Test, Po=25.5dBm (Single Carrier Level)

ELECTRICAL CHARACTERISTICS (Ta= 25° C)

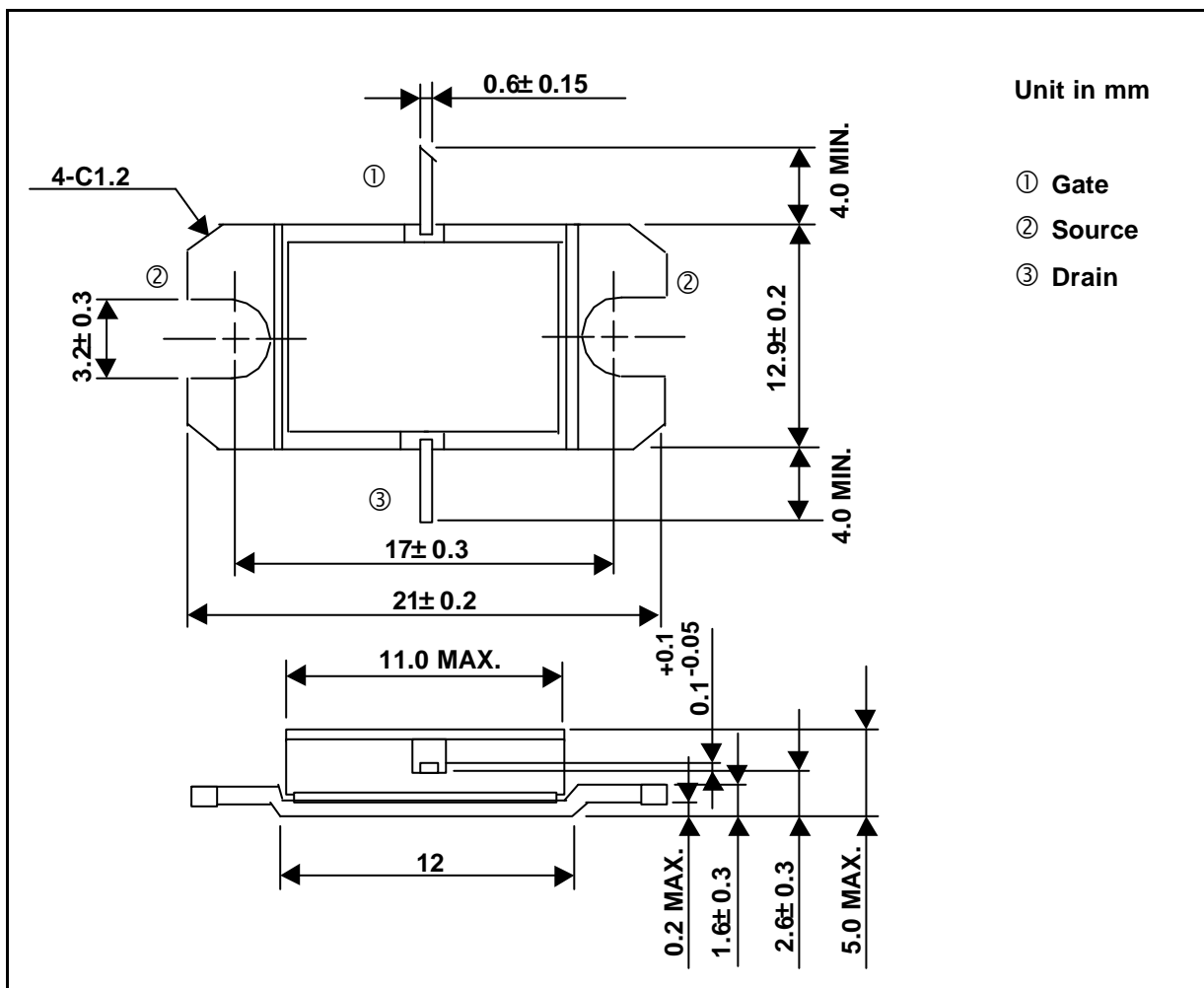
CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Transconductance	gm	VDS= 3V IDS= 1.5A	mS	—	900	—
Pinch-off Voltage	VGS _{off}	VDS= 3V IDS= 15mA	V	-1.0	-2.5	-4.0
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	A	—	2.6	3.5
Gate-Source Breakdown Voltage	VGS _O	IGS= -50μA	V	-5	—	—
Thermal Resistance	R _{th(c-c)}	Channel to Case	°C/W	—	4.5	6.5

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ABSOLUTE MAXIMUM RATINGS (Ta= 25° C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	VDS	V	15
Gate-Source Voltage	VGS	V	-5
Drain Current	IDS	A	3.5
Total Power Dissipation (Tc= 25 °C)	PT	W	23.0
Channel Temperature	Tch	°C	175
Storage Temperature	Tstg	°C	-65 to +175

PACKAGE OUTLINE (2-11D1B)**HANDLING PRECAUTIONS FOR PACKAGED TYPE**

Soldering iron should be grounded and the operating time should not exceed 10 seconds at 260° C.