

**FEATURES**

■ **HIGH POWER**

P1dB=39.5dBm at 4.4GHz to 5.0GHz

■ **HIGH GAIN**

G1dB=9.5dB at 4.4GHz to 5.0GHz

■ **BROAD BAND INTERNALLY MATCHED**

■ **HERMETICALLY SEALED PACKAGE**

**RF PERFORMANCE SPECIFICATIONS ( Ta= 25° C )**

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB Compression Point	P1dB	VDS= 10V f= 4.4 to 5.0GHz	dBm	38.5	39.5	—
Power Gain at 1dB Compression Point	G1dB		dB	8.5	9.5	—
Drain Current	IDS1		A	—	2.2	2.6
Gain Flatness	ΔG		dB	—	—	±0.6
Power Added Efficiency	η <sub>add</sub>		%	—	36	—
3 <sup>rd</sup> Order Intermodulation Distortion	IM3	NOTE	dBc	-42	-45	—
Drain Current	IDS2		A	—	2.2	2.6
Channel Temperature Rise	ΔT <sub>ch</sub>	VDS X IDS X R <sub>th(c-c)</sub>	°C	—	—	80

NOTE : Two Tone Test, Po=28.5dBm (Single Carrier Level)

**ELECTRICAL CHARACTERISTICS ( Ta= 25° C )**

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Transconductance	G <sub>m</sub>	VDS= 3V IDS= 3.0A	mS	—	1800	—
Pinch-off Voltage	VGS <sub>off</sub>	VDS= 3V IDS= 30mA	V	-1.0	-2.5	-4.0
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	A	—	5.2	7.0
Gate-Source Breakdown Voltage	VGS <sub>O</sub>	IGS= -100μA	V	-5	—	—
Thermal Resistance	R <sub>th(c-c)</sub>	Channel to Case	°C/W	—	2.5	3.8

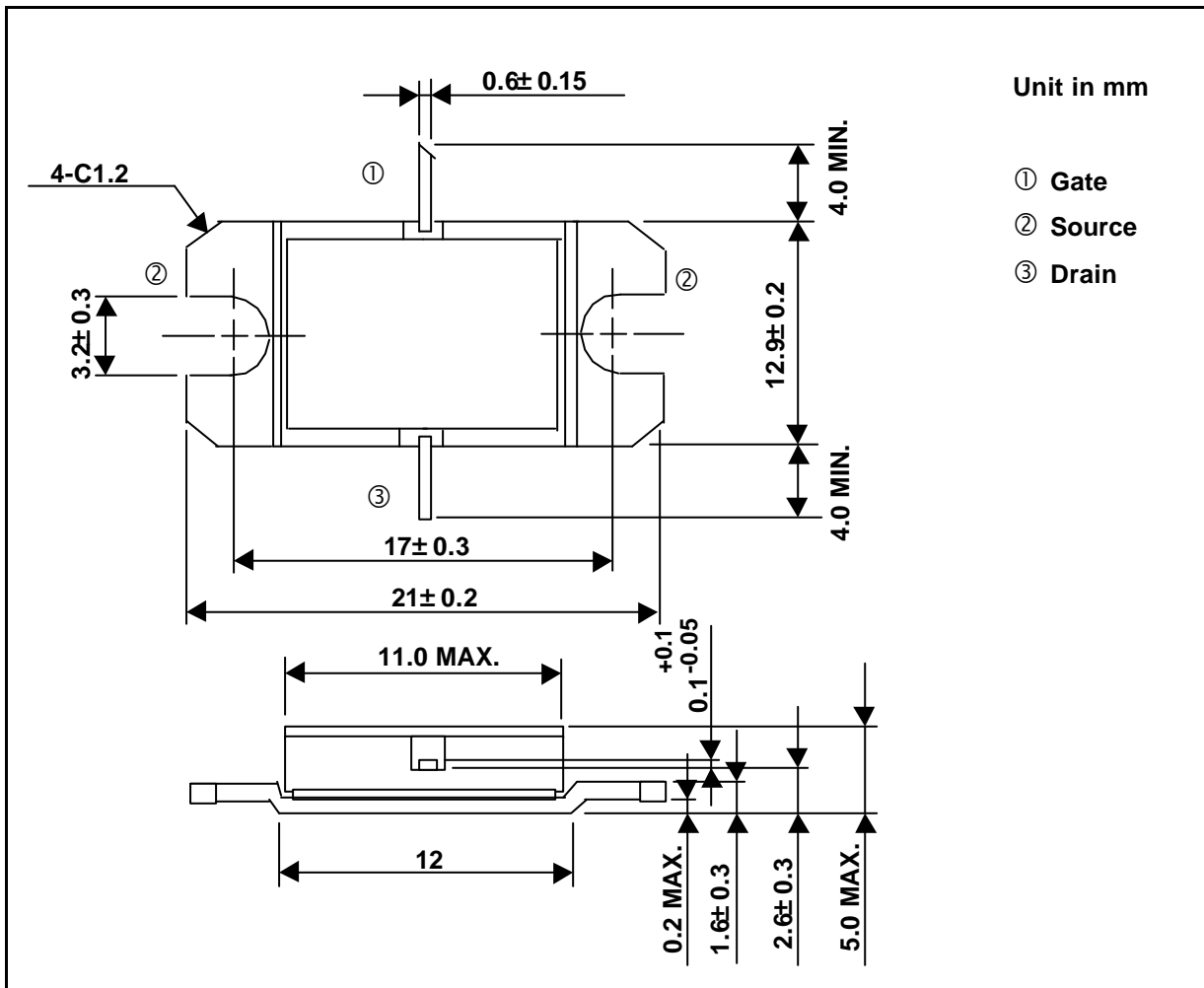
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**ABSOLUTE MAXIMUM RATINGS ( Ta= 25° C )**

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	VDS	V	15
Gate-Source Voltage	VGS	V	-5
Drain Current	IDS	A	7.0
Total Power Dissipation (Tc= 25 °C)	PT	W	37.5
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.