

FEATURES

- **HIGH POWER**
 Pout=47.0dBm at Pin=41.0dBm
- **HIGH GAIN**
 GL=9.0dB at 8.5GHz to 9.6GHz
- **BROAD BAND INTERNALLY MATCHED HEMT**
 HERMETICALLY SEALED PACKAGE

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Output Power	Pout	VDS= 24V	dBm	46.0	47.0	—
Drain Current	IDS1	IDSset≧1.5A	A	—	5.0	6.0
Power Added Efficiency	η_{add}	f = 8.5 to 9.6GHz @Pin = 41dBm	%	—	31	—
Linear Gain	GL	@Pin = 20dBm	dB	7.0	9.0	—
Channel Temperature Rise	ΔT_{ch}	(VDS X IDS1 + Pin – Pout)X Rth(c-c)	°C	—	130	150

Recommended gate resistance(Rg) : Rg= 13.3 Ω (TYP.)

ELECTRICAL CHARACTERISTICS (Ta= 25°C)

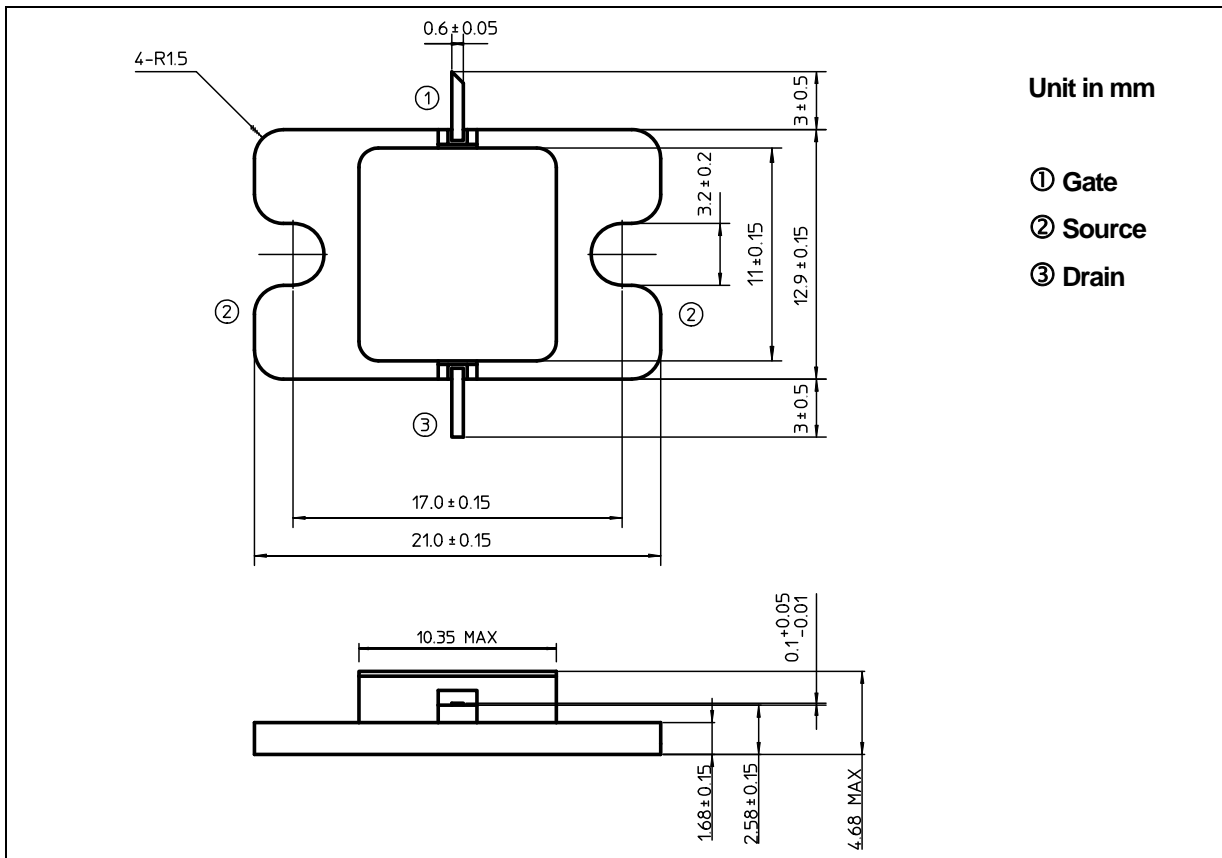
CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Transconductance	gm	VDS= 5V IDS= 5.0A	S	—	4.5	—
Pinch-off Voltage	VGSoff	VDS= 5V IDS= 23mA	V	-1	-4	-6
Saturated Drain Current	IDSS	VDS= 5V VGS= 0V	A	—	15	—
Gate-Source Breakdown Voltage	VGSO	IGS= -10mA	V	-10	—	—
Thermal Resistance	Rth(c-c)	Channel to Case	°C/W	—	—	1.6

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ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	VDS	V	50
Gate-Source Voltage	VGS	V	-10
Drain Current	IDS	A	15
Total Power Dissipation (Tc= 25 °C)	PT	W	140
Channel Temperature	Tch	°C	250
Storage	Tstg	°C	-65 to +175

PACKAGE OUTLINE (7- AA04A)



HANDLING PRECAUTIONS FOR PACKAGE MODEL

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