

FEATURES

n **HIGH POWER**

Pout=47.0dBm at Pin=41.0dBm

n **BROAD BAND INTERNALLY MATCHED HEMT**

HERMETICALLY SEALED PACKAGE

n **HIGH GAIN**

GL=9.0dB at 9.5GHz to 10.5GHz

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 = 9.5G to 10.5GHz @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.)

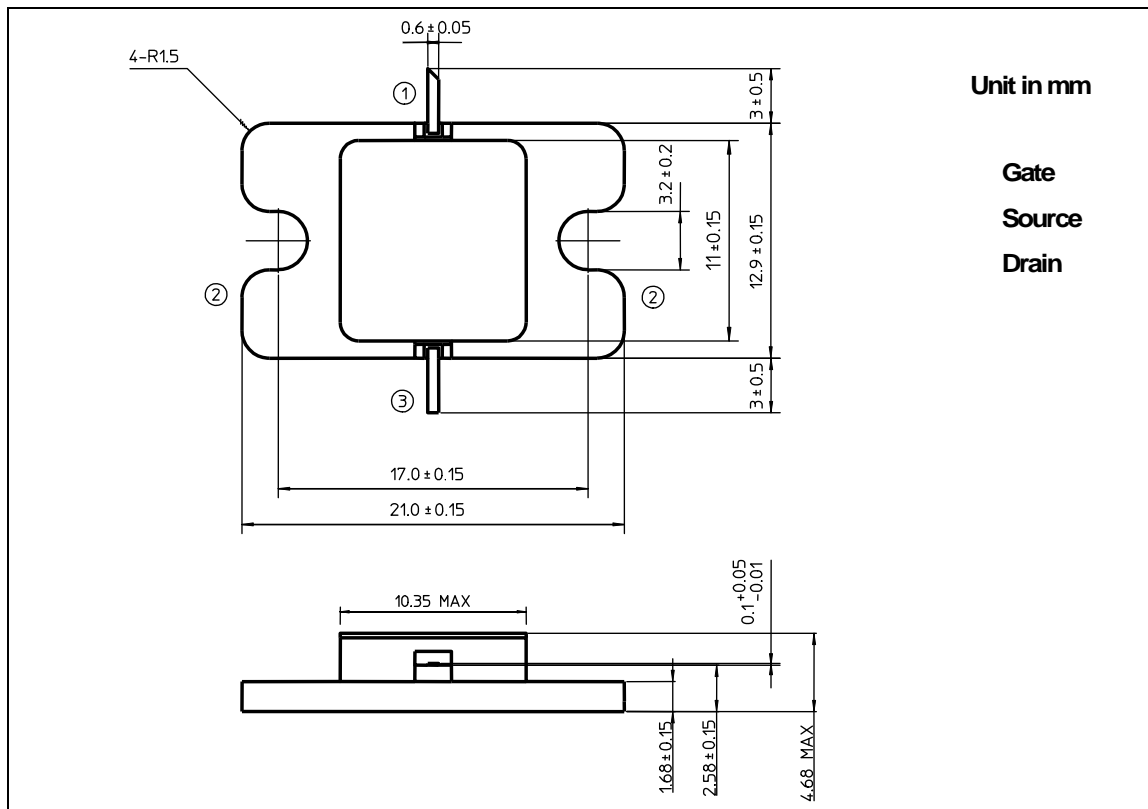
ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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 PACKAGED MODEL**

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