

**TIM5964-60SL-251****1. RF PERFORMANCE SPECIFICATIONS ( Ta= 25 °C )**

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power at 1dB Compression Point	P1dB	VDS= 10V f= 5.9–6.75GHz IDS set = 9.5A	47.0	48.0	—	dBm
Power Gain at 1dB Compression Point	G1dB		7.5	8.5	—	dB
Drain Current	IDS		—	13.2	15.0	A
Power Added Efficiency	$\eta_{add}$		—	41	—	%
3rd Order Intermodulation Distortion	IM <sub>3</sub>	NOTE	-40	—	—	dBc

NOTE : Two Tone Test, Po= 36.5dBm (Single Carrier Level)

Recommended Gate Resistance(Rg) : 28  $\Omega$  (Max.)

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

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	gm	VDS= 3V IDS= 12A	—	20	—	S
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 200mA	-1.0	-1.8	-3.0	V
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	—	24	31	A
Gate-Source Breakdown Voltage	VGSO	IGS= -1.0mA	-5	—	—	V
Thermal Resistance	Rth(c-c)	Channel to Case	—	0.6	0.8	°C/W
Channel-Temperature Rise	$\Delta T_{ch}$	VDS×IDS×Rth(c-c)	—	—	90	°C

The specifications contained herein are subject to change without notice.

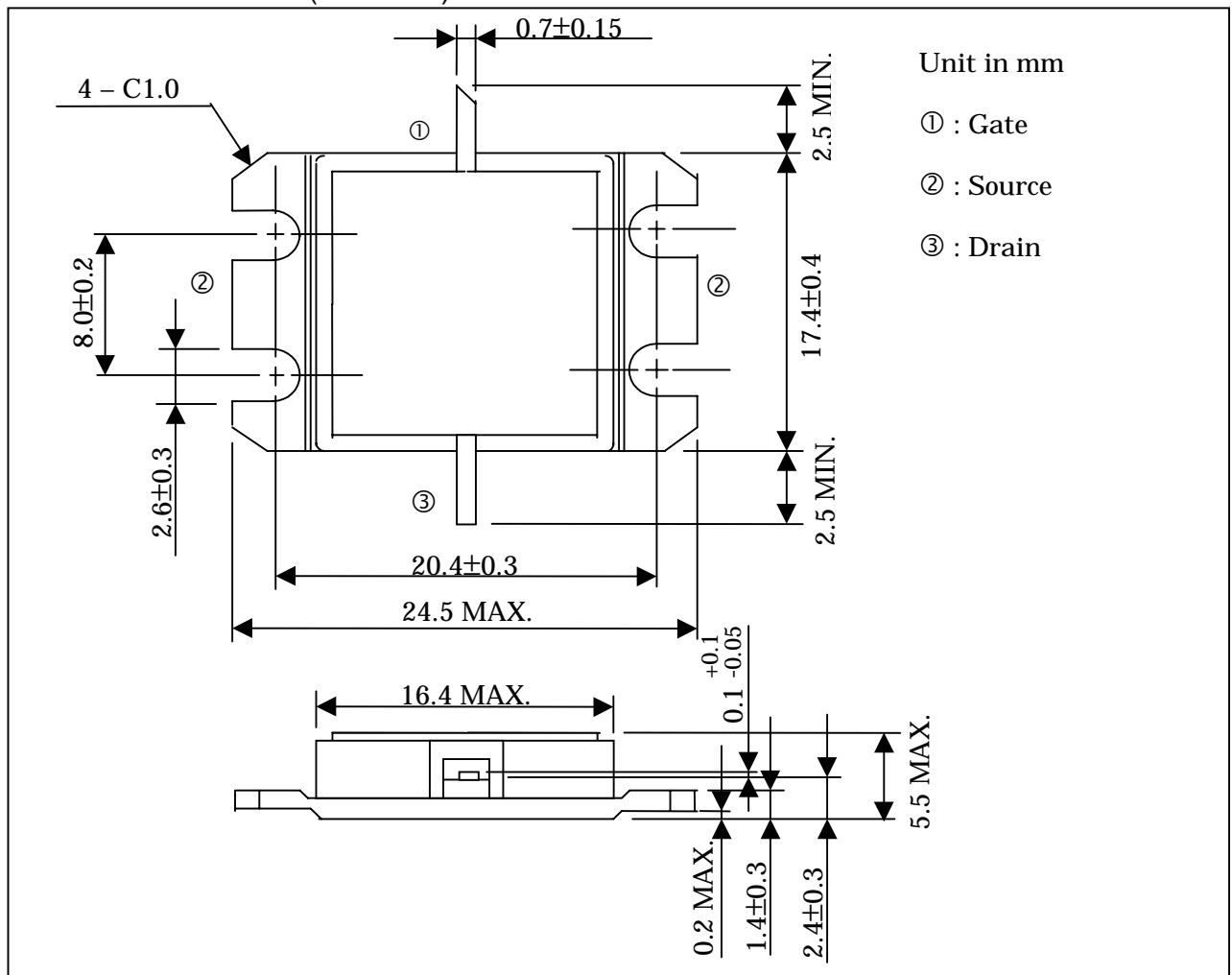
# PRELIMINARY

March 2001

## 3. ABSOLUTE MAXIMUM RATINGS ( Ta= 25°C )

CHARACTERISTICS	SYMBOL	RATING	UNIT
Drain-Source Voltage	VDS	15	V
Gate-Source Voltage	VGS	-5	V
Drain Current	IDS	31	A
Total Power Dissipation (Tc= 25 °C)	PT	125	W
Channel Temperature	Tch	175	°C
Storage Temperature	Tstg	-65 ~ +175	°C

## PACKAGE OUTLINE (2-16G1B)



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