

TIM1414-10A-252

1. RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power at 1dB Compression Point	P _{1dB}	V _{DS} = 9V f=13.75-14.5GHz	39.0	39.5	-	dBm
Power Gain at 1dB Compression Point	G _{1dB}		4.5	5.5	-	dB
Drain Current	I _{DS}		-	4.0	5.0	A
Power Added Efficiency	η _{add}		-	23	-	%
Channel Temperature Rise	T _{ch}	V _{DS} x I _{DS} x R _{th}	-	-	90	°C

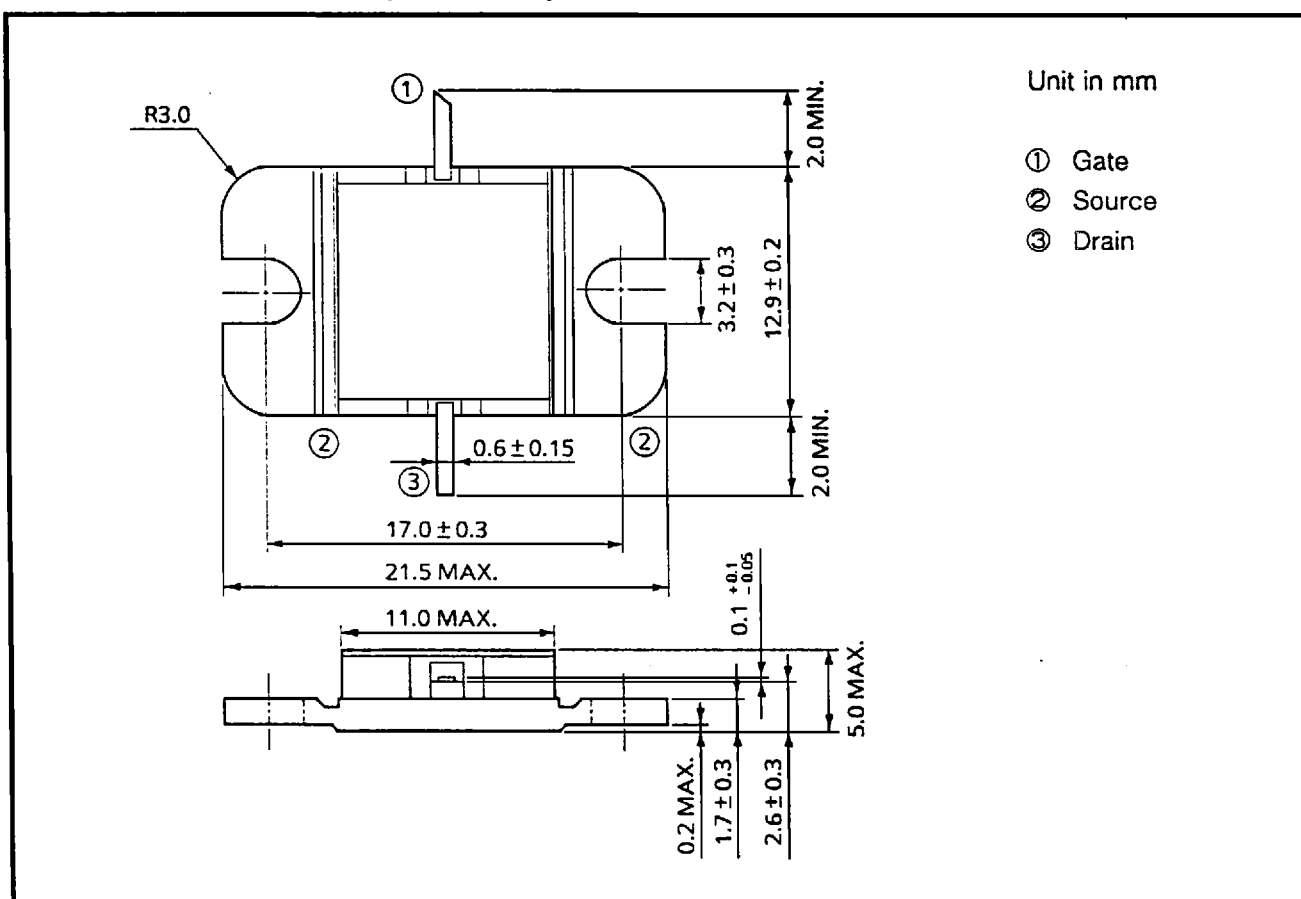
2. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	g _m	V _{DS} = 3V I _{DS} = 4.8A	-	2800	-	mS
Pinch-off Voltage	V _{GSoff}	V _{DS} = 3V I _{DS} = 145mA	-2.0	-3.5	-5.0	V
Saturated Drain Current	I _{DSS}	V _{DS} = 3V V _{GS} =0V	-	10.0	11.5	A
Gate-Source Breakdown Voltage	V _{GSO}	I _{GS} = -145μA	-5	-	-	V
Thermal Resistance	R _{th(c-c)}	Channel to Case	-	2.0	2.5	°C/W

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	V_{DS}	V	15
Gate-Source Voltage	V_{GS}	V	-5
Drain Current	I_{DS}	A	11.5
Total Power Dissipation (T _C = 25°C)	P_T	W	60
Channel Temperature	T _{ch}	°C	175
Storage Temperature	T _{stg}	°C	-65~175

PACKAGE OUTLINE (2-11C1B)



HANDLING PRECAUTIONS FOR PACKAGED TYPE

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