

TIM5964-35SLA-151

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

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power at 1dB Compression Point	P _{1dB}	V _{DS} = 10V f=5.85- 6.65GHz	45.0	45.5	—	dBm
Power Gain at 1dB Compression Point	G _{1dB}		7.0	8.0	—	dB
Drain Current	I _{DS1}		—	8.0	9.0	°C
3rd Order Intermodulation Distortion	IM ₃	NOTE 1	-42	-45	—	dBc
Drain Current	I _{DS2}		—	8.0	9.0	A
Channel Temperature Rise	ΔT _{ch}	NOTE 2	—	—	100	°C

NOTE 1 : Two Tone Test, P_o= 35dBm (Single Carrier Level)

NOTE 2 : R_{th(c-c)} × [V_{DS} × I_{DS}]

2. ELECTRICAL CHARACTERISTICS (Ta= 25 °C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	g _m	V _{DS} = 3V I _{DS} = 10.5A	—	6500	—	mS
Pinch-off Voltage	V _{GSoff}	V _{DS} = 3V I _{DS} = 140mA	-1.0	-2.5	-4.0	V
Saturated Drain Current	I _{DSS}	V _{DS} = 3V V _{GS} = 0V	—	20	26	A
Gate-Source Breakdown Voltage	V _{GS0}	I _{GS} = -420 μA	-5	—	—	V
Thermal Resistance	R _{th(c-c)}	Channel to Case	—	1.0	1.3	°C/W

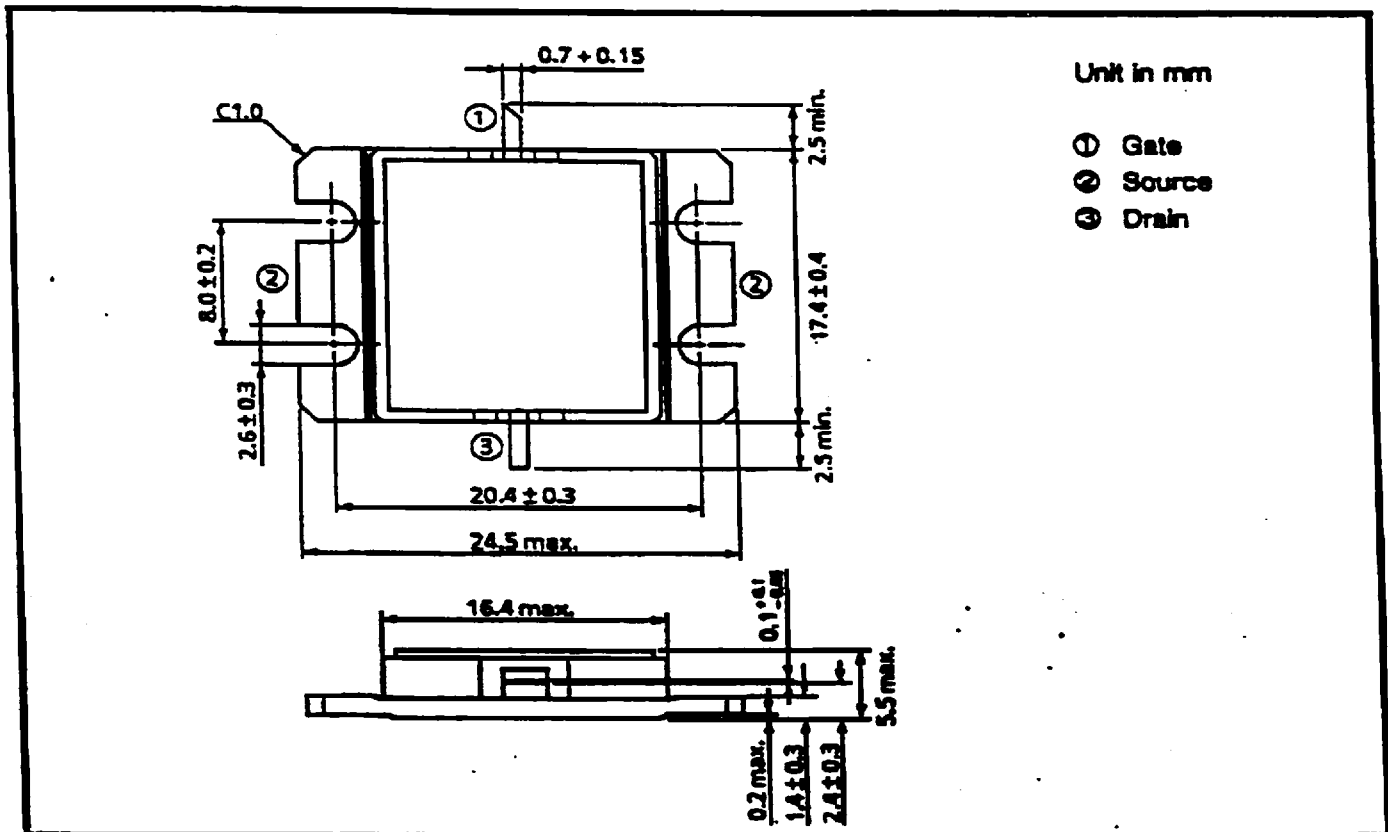
Applications Engineering

Solid-State Engineering Department

TOSHIBA CORPORATION, Komukai Works

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	26
Total Power Dissipation (T _C = 25°C)	P _T	W	115
Channel Temperature	T _{ch}	°C	175
Storage Temperature	T _{stg}	°C	-65-175

PACKAGE OUTLINE (2-16G1B)**HANDLING PRECAUTIONS FOR PACKAGED TYPE**

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