

TIM7785-35SL**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=7.7-8.5 GHz	45.0	45.5	—	dBm
Power Gain at 1dB Compression Point	G _{1dB}		5.0	6.0	—	dB
Drain Current	I _{DS1}		—	8.0	9.0	A
Gain Flatness	ΔG		—	—	±0.8	dB
Power Added Efficiency	η _{add}		—	33	—	%
3rd Order Intermodulation Distortion	IM ₃	NOTE	-42	-45	—	dBc
Drain Current	I _{DS2}		—	8.0	9.0	A

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

2. ELECTRICAL CHARACTERISTICS (Ta= 25 °C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	gm	V _{DS} =3 V I _{DS} =10.5 A	—	6500	—	mS
Pinch-off Voltage	V _{GSoff}	V _{DS} =3 V I _{DS} = 140 mA	-1.0	-2.5	-4.0	V
Saturated Drain Current	I _{DSS}	V _{DS} =3 V V _{GS} = 0 V	—	20	26	A
Gate-Source Breakdown Voltage	V _{GSO}	I _{GS} = -420 μA	-5	—	—	V
Thermal Resistance	R _{th(c-c)}	Channel to Case	—	1.0	1.3	°C/W
Channel-Temperature Rise	ΔT _{ch}	V _{DS} ×I _{DS} ×R _{th(c-c)}	—	—	100	°C

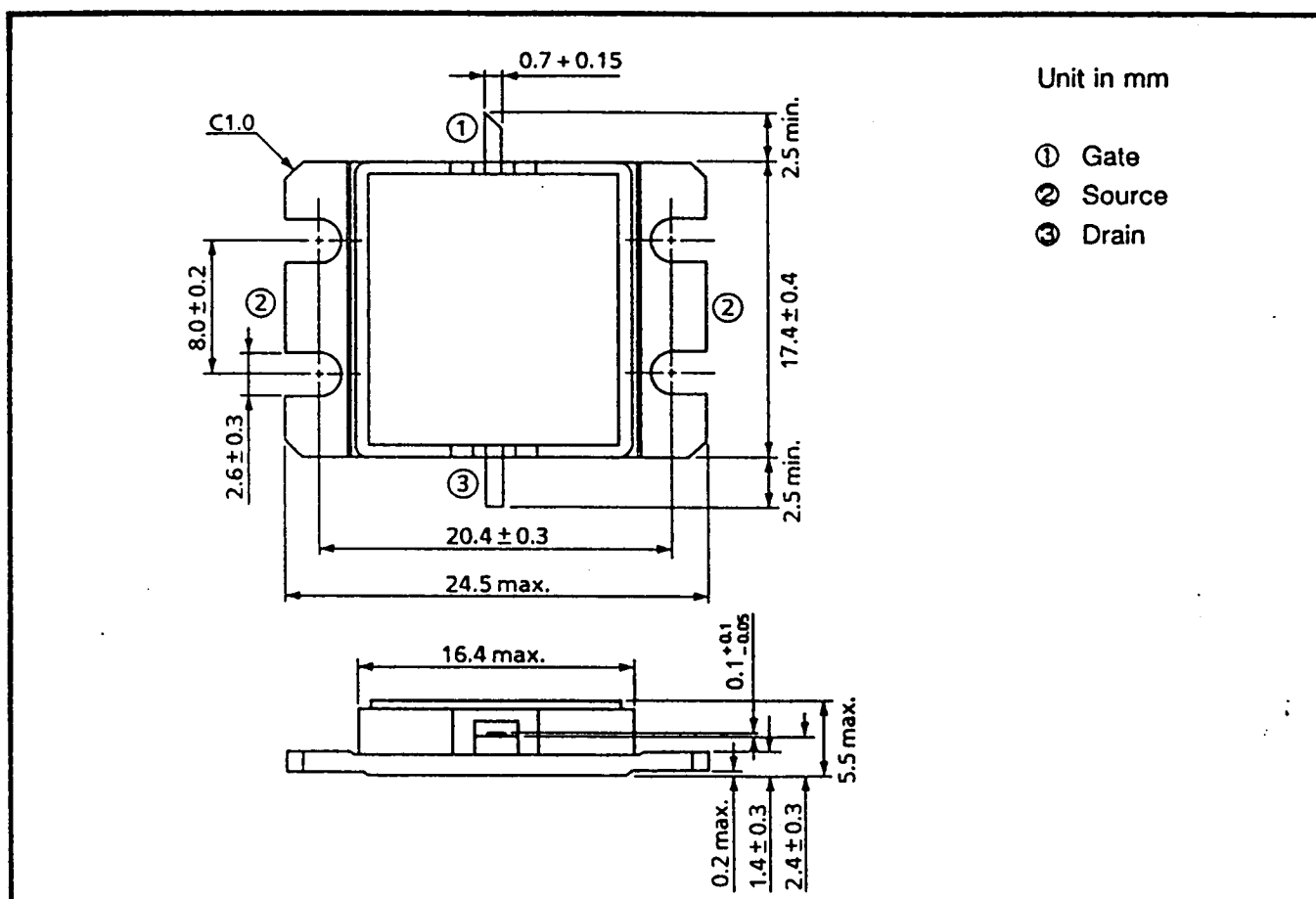
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3. ABSOLUTE MAXIMUM RATINGS (Ta= 25 °C)

CHARACTERISTICS	SYMBOL	RATINGS	RATINGS
Drain-Source Voltage	VDS	15	V
Gate-Source Voltage	VGS	-5	V
Drain Current	IDS	26	A
Total Power Dissipation(Tc=25°C)	PT	115	W
Channel Temperature	Tch	175	°C
Storage Temperature	Tstg	-65~175	°C

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.

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