

TOSHIBA

MICROWAVE SEMICONDUCTOR TECHNICAL DATA

MICROWAVE POWER GaAs FET
Non-Matched

S9G67A
Preliminary

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 = 2.7 GHz	34.5	35.5	—	dBm
Power Gain at 1dB Compression Point	G _{1dB}		9.0	10.0	—	dB
Drain Current	I _{DS1}		—	0.7	0.9	A
Power Added Efficiency	η_{add}		—	46	—	%

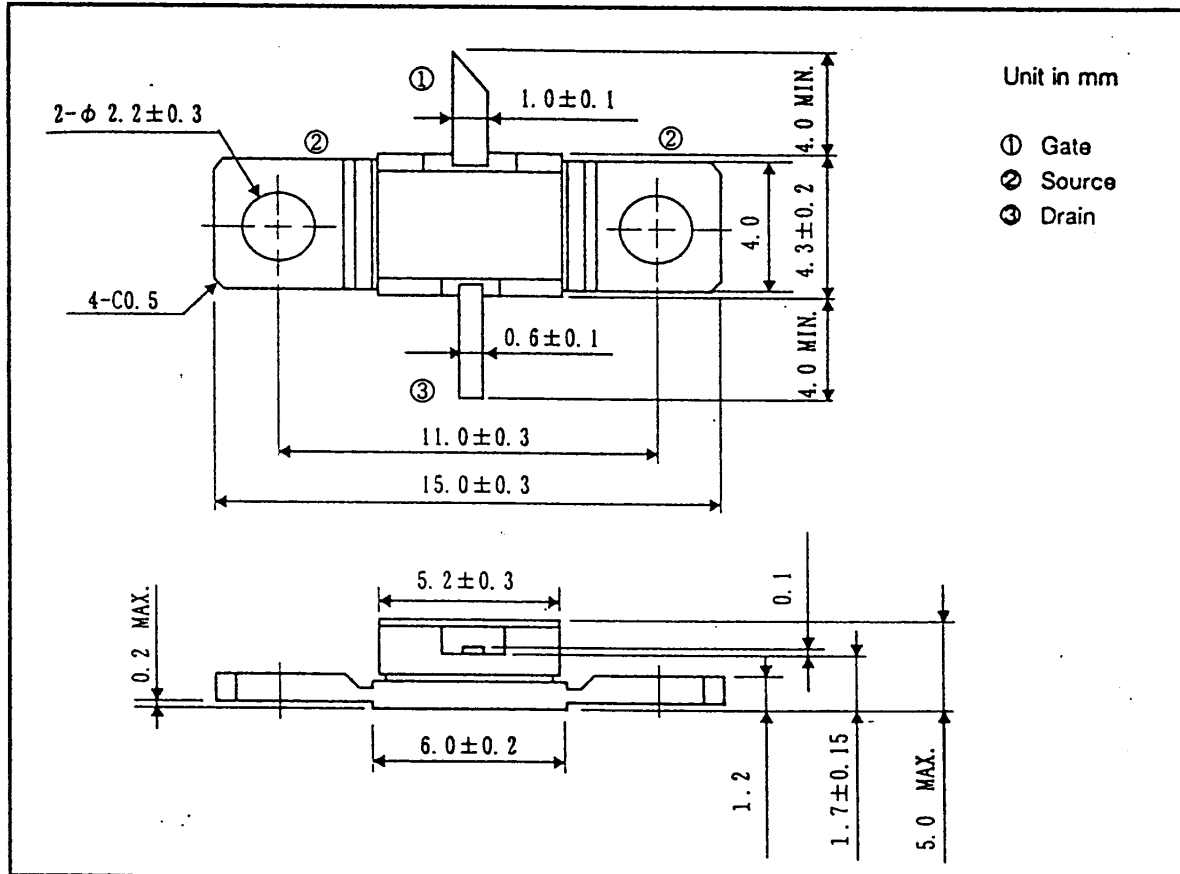
2. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	g _m	V _{DS} = 3V I _{DS} = 1.0A	—	1100	—	mS
Pinch-off Voltage	V _{GSoff}	V _{DS} = 3V I _{DS} = 18mA	-1.0	-2.0	-4.0	V
Saturated Drain Current	I _{DSS}	V _{DS} = 3V V _{GS} =0V	—	2.2	3.5	A
Gate-Source Breakdown Voltage	V _{GSO}	I _{GS} = -50μA	-5	—	—	V
Thermal Resistance	R _{th(c-c)}	Channel to Case	—	8.0	9.5	°C/W

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	3.5	A
Total Power Dissipation (Tc= 25 °C)	PT	15	W
Channel Temperature	Tch	175	°C
Storage	Tstg	-65 ~ +175	°C

PACKAGE OUTLINE



HANDLING PRECAUTIONS FOR PACKAGED TYPE

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

The information contained here is subject to change without notice.

Applications Engineering
Microwave Solid-State Department

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