

FEATURES

■ **HIGH POWER**

P2dB=47.0dBm at 2.8GHz to 2.9GHz

■ **HIGH GAIN**

G2dB=7.0dB at 2.8GHz to 2.9GHz

■ **PARTIALLY MATCHED TYPE**

■ **HERMETICALLY SEALED PACKAGE**

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Output Power at 2dB Gain Compression Point	P2dB	VDS= 12V f = 2.8GHz to 2.9GHz IDSset≅10.0A	dBm	47.0	48.0	—
Power Gain at 2dB Gain Compression Point	G2dB		dB	7.0	7.5	—
Drain Current	IDS		A	—	15	17
Power Added Efficiency	η_{add}		%	—	29	—

Recommended gate resistance (Rg) : Rg = 30 Ω (Max.)

ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Transconductance	gm	VDS= 3V IDS= 12.0A	S	—	20.0	—
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 300mA	V	-1.0	-1.8	-3.0
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	A	—	38	—
Gate-Source Breakdown Voltage	VGSO	IGS= -10.0 mA	V	-5	—	—
Thermal Resistance	Rth(c-c)	Channel to Case	°C/W	—	0.6	0.8

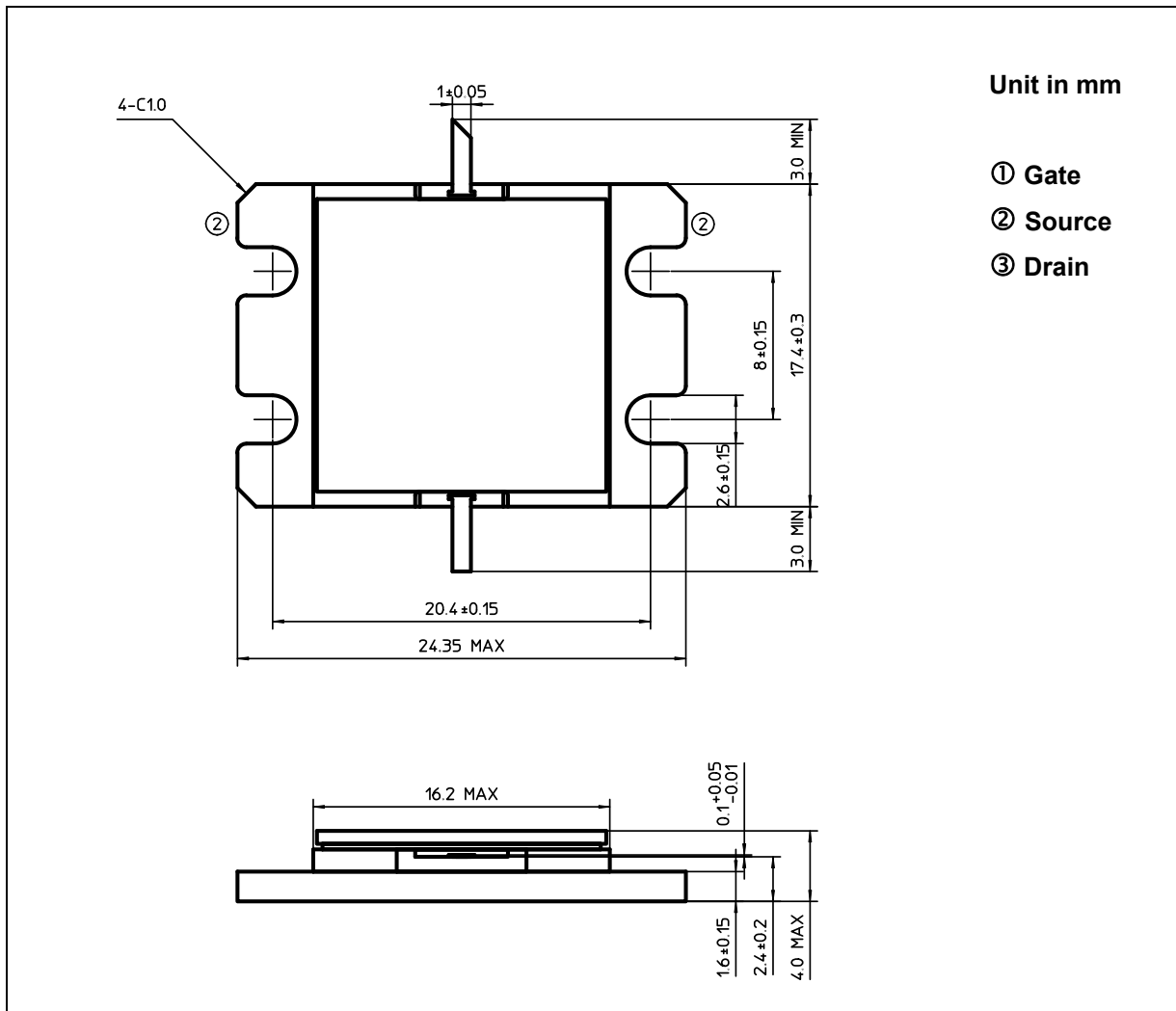
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ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	VDS	V	15
Gate-Source Voltage	VGS	V	-5
Drain Current	IDS	A	26.0
Total Power Dissipation (Tc= 25 °C)	PT	W	187.5
Channel Temperature	Tch	°C	175
Storage	Tstg	°C	-65 ~ +175

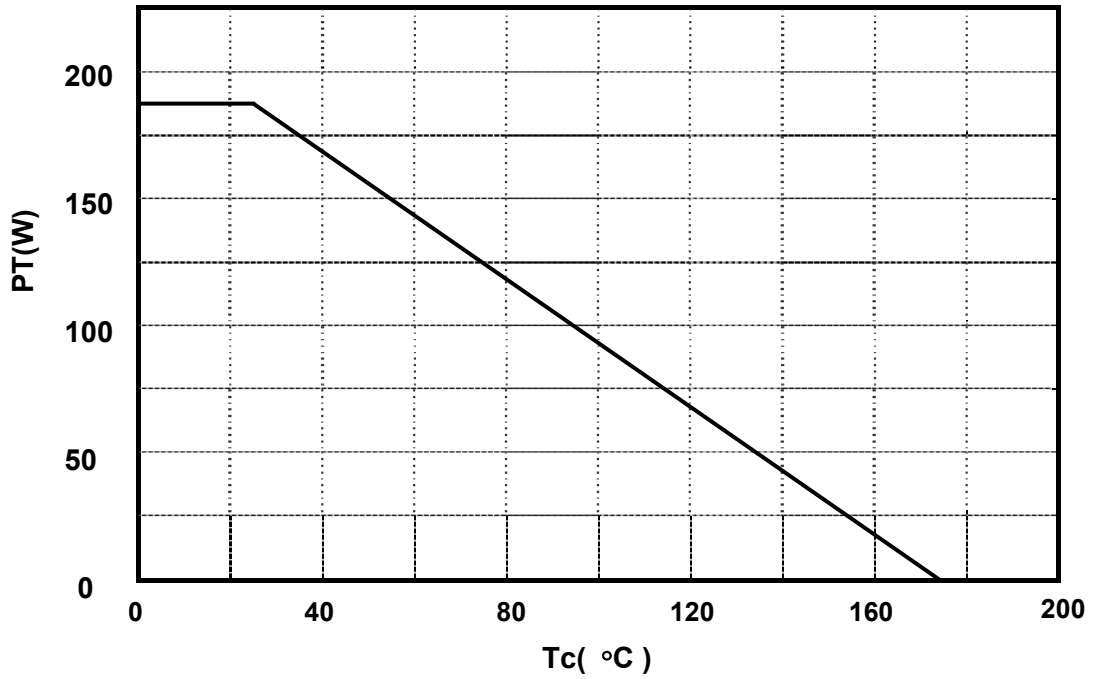
PACKAGE OUTLINE (2-16G6A)



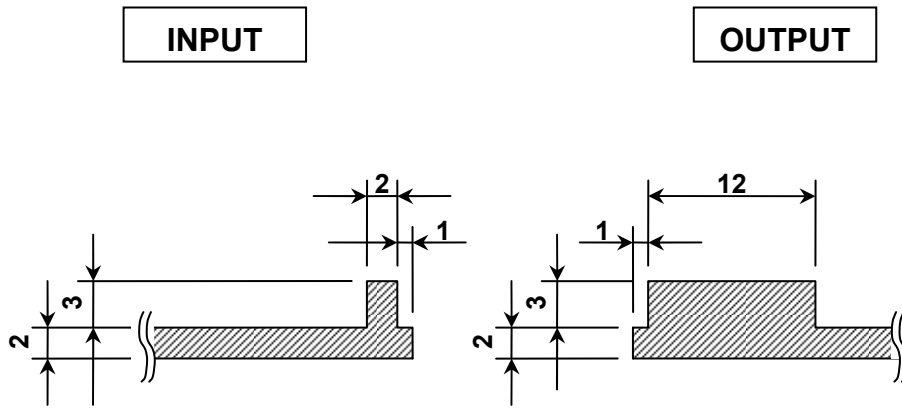
HANDLING PRECAUTIONS FOR PACKAGE MODEL

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

Power Dissipation(PT) vs. Case Temperature(Tc)



DRAWING OF RECOMMENDABLE MATCHING NETWORK



Unit: mm

Substrate Material: Teflon (Er=2.8)

Thickness: 0.8 mm