

FEATURES

n LOW INTERMODULATION DISTORTION

IM3=-45 dBc at Pout= 28.5dBm
 Single Carrier Level

n HIGH POWER

P1dB=39.5dBm at 3.3GHz to 3.6GHz

n HIGH GAIN

G1dB=10.0dB at 3.3GHz to 3.6GHz

n BROAD BAND INTERNALLY MATCHED FET

n HERMETICALLY SEALED PACKAGE

RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Output Power at 1dB Gain Compression Point	P1dB	VDS= 10V f= 3.3 to 3.6GHz	dBm	38.5	39.5	—
Power Gain at 1dB Gain Compression Point	G1dB		dB	10.0	—	—
Drain Current	IDS1		A	—	2.2	2.6
Gain Flatness	ΔG		dB	—	—	±0.6
Power Added Efficiency	ηadd		%	—	37	—
3 rd Order Intermodulation Distortion	IM3	Two-Tone Test Po=28.5dBm	dBc	-42	-45	—
Drain Current	IDS2	(Single Carrier Level)	A	—	2.2	2.6
Channel Temperature Rise	ΔTch	(VDS X IDS + Pin - P1dB) X Rth(c-c)	°C	—	—	80

Recommended Gate Resistance(Rg): 150 W (Max.)

ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITIONS	UNIT	MIN.	TYP.	MAX.
Transconductance	gm	VDS= 3V IDS= 2.6A	mS	—	1600	—
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 35mA	V	-1.0	-2.5	-4.0
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	A	—	5.0	—
Gate-Source Breakdown Voltage	VGSO	IGS= -105μA	V	-5	—	—
Thermal Resistance	Rth(c-c)	Channel to Case	°C/W	—	2.3	3.8

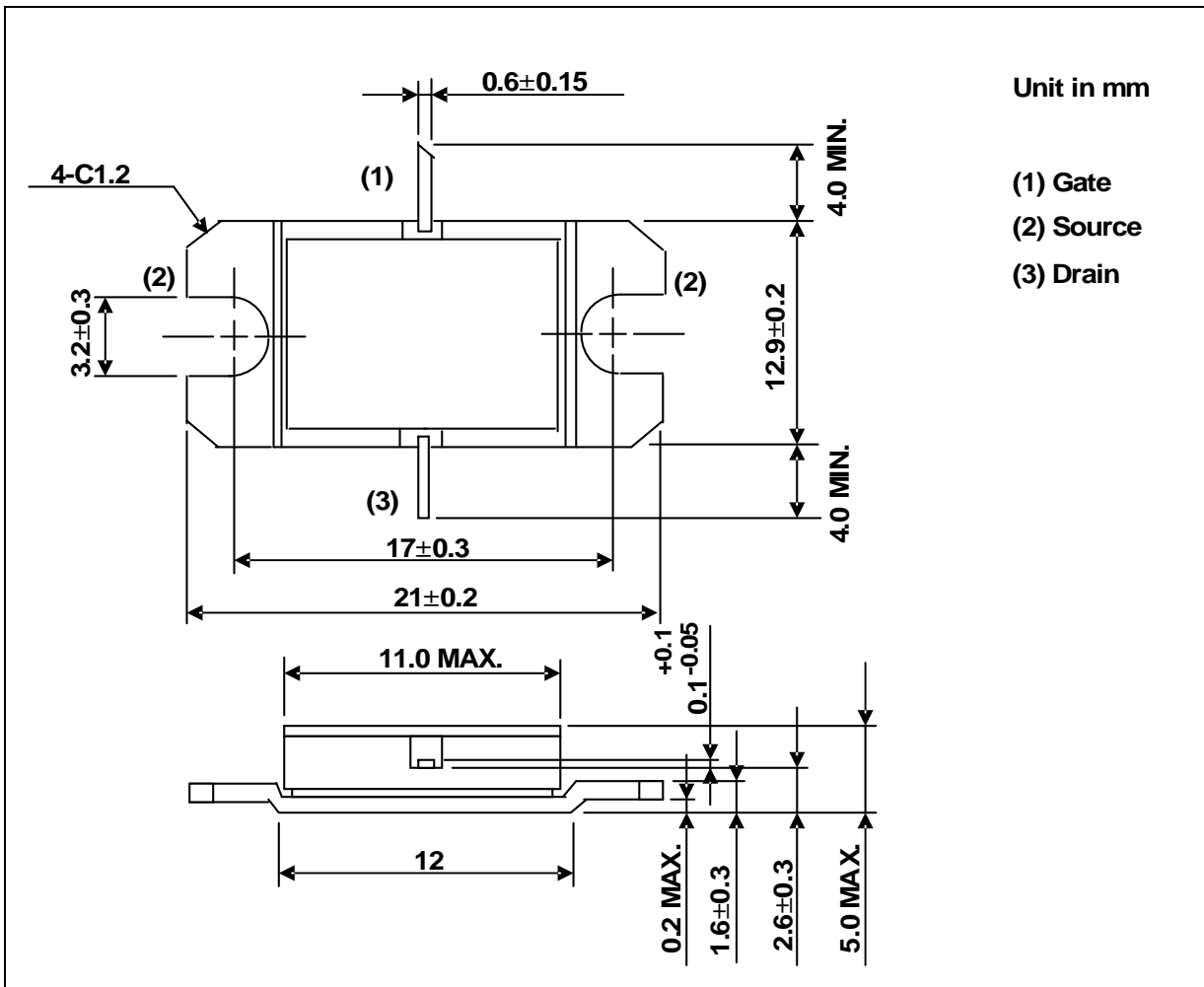
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ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATING
Drain-Source Voltage	VDS	V	15
Gate-Source Voltage	VGS	V	-5
Drain Current	IDS	A	6.5
Total Power Dissipation (Tc= 25 °C)	PT	W	39.5
Channel Temperature	Tch	°C	175
Storage Temperature	Tstg	°C	-65 to +175

PACKAGE OUTLINE (2-11D1B)

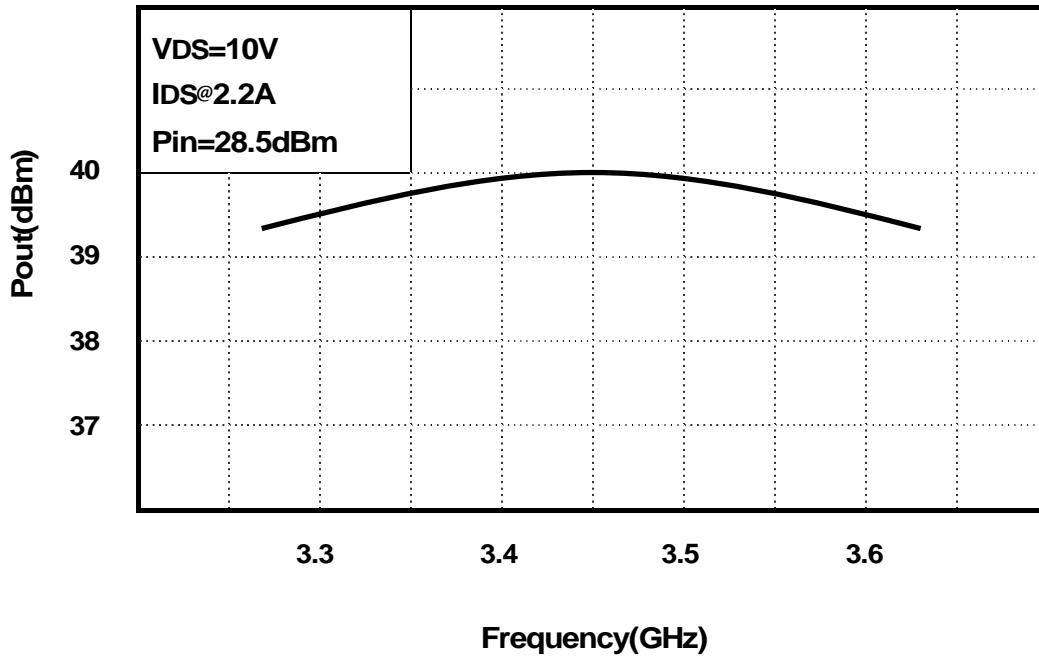


HANDLING PRECAUTIONS FOR PACKAGE MODEL

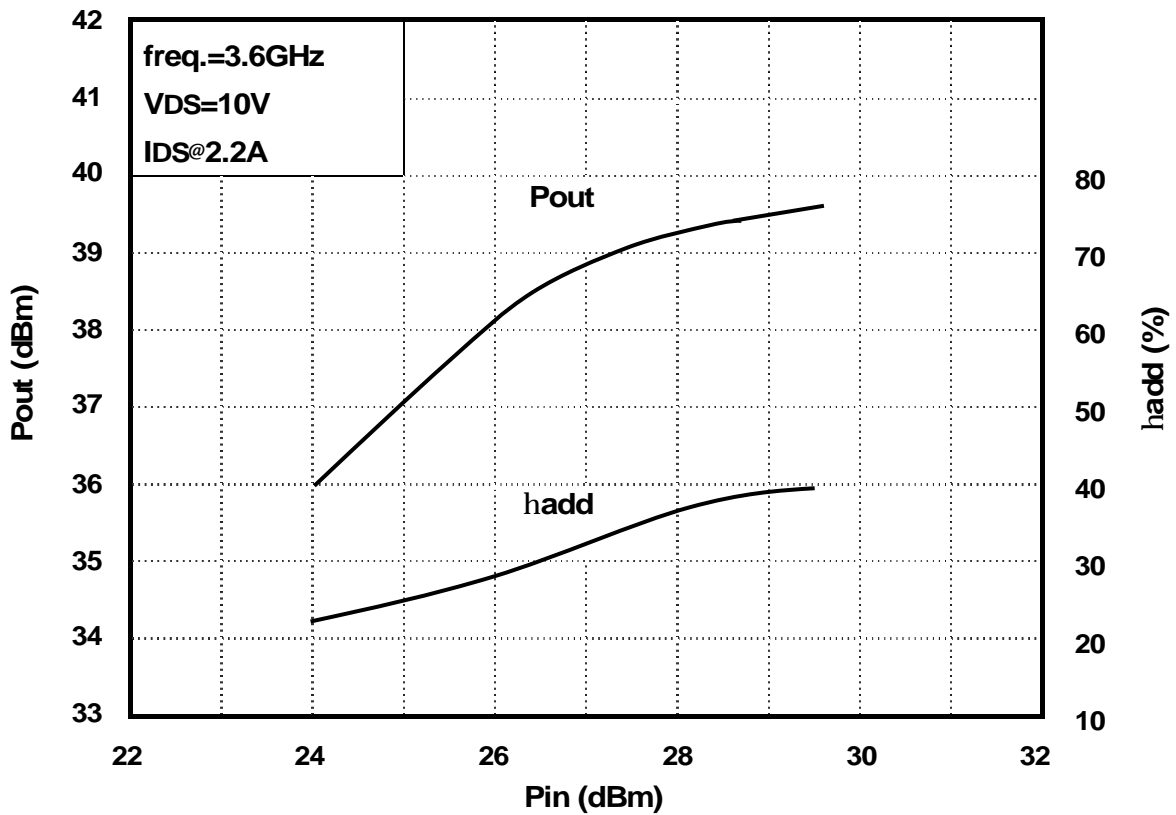
Soldering iron should be grounded and the operating time should not exceed 10 seconds at 260°C.

RF PERFORMANCE

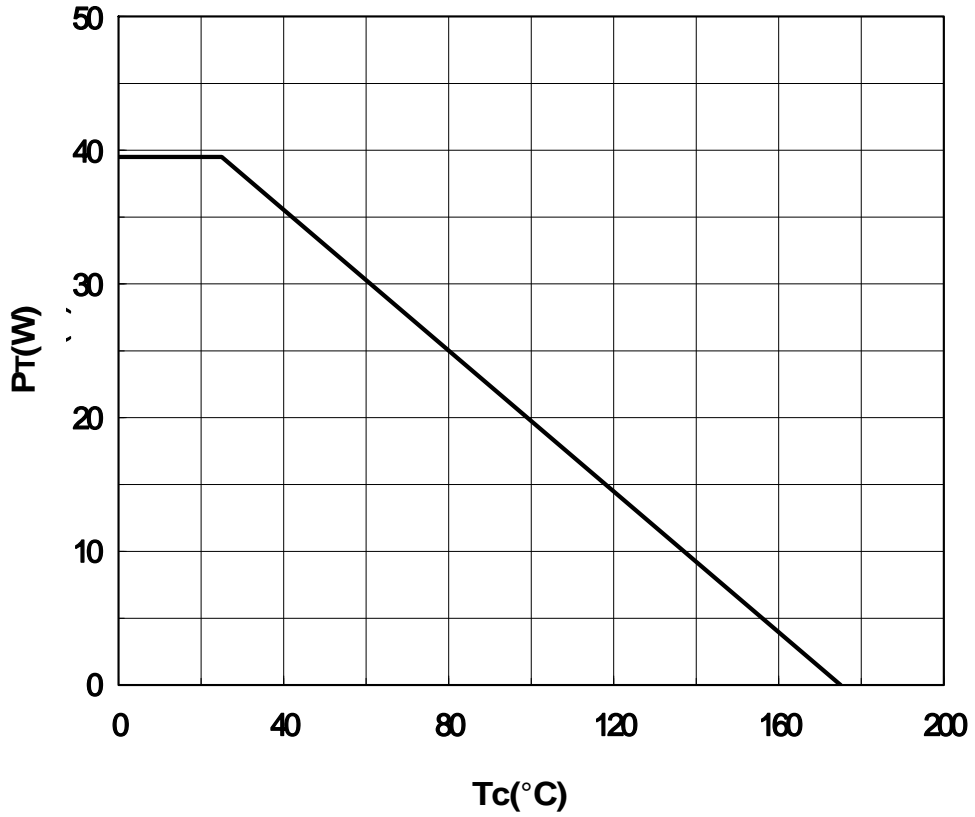
Output Power (Pout) vs. Frequency



Output Power(Pout) vs. Input Power(Pin)



Power Dissipation vs. Case Temperature



IM3 vs. Output Power Characteristics

