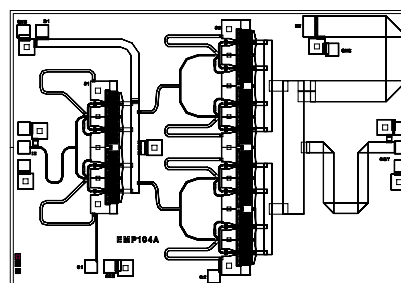


FEATURES

- 5.0 – 6.5 GHz Operating Frequency Range
- 33.0dBm Output Power at 1dB Compression
- 18.0 dB Typical Small Signal Gain
- -44dBc OIMD3 @Each Tone Pout 22dBm

APPLICATIONS

- Point-to-point and point-to-multipoint radio
- Military Radar Systems


 Dimension: 2200um X 3230um
 Thickness: 65um ± 15um

Caution! ESD sensitive device.

ELECTRICAL CHARACTERISTICS (T_a = 25 °C, 50 ohm, VDD=10V, IDQ=1000mA)

SYMBOL	PARAMETER/TEST CONDITIONS	MIN	TYP	MAX	UNITS
F	Operating Frequency Range	5.0		6.5	GHz
P1dB	Output Power at 1dB Gain Compression	32.0	33.0		dBm
Gss	Small Signal Gain	16.0	18.0		dB
OIMD3	Output 3 rd Order Intermodulation Distortion @Δf=10MHz, Each Tone Pout 22dBm		-44	-40	dBc
Input RL	Input Return Loss		-8	-6	dB
Output RL	Output Return Loss		-6		dB
Idss	Saturate Drain Current V _{DS} =3V, V _{GS} =0V		1680		mA
V_{DD}	Power Supply Voltage		10		V
Rth	Thermal Resistance (Au-Sn Eutectic Attach)		7		°C/W
Tb	Operating Base Plate Temperature	- 35		+ 80	°C

ABSOLUTE MAXIMUM RATINGS FOR CONTINUOUS OPERATION^{1,2}

SYMBOL	CHARACTERISTIC	VALUE
V _{DS}	Drain to Source Voltage	10V
V _{GS}	Gate to Source Voltage	- 4V
I _{DD}	Drain Current	Idss
I _{GSF}	Forward Gate Current	35 mA
P _{IN}	Input Power	@ 3dB compression
T _{CH}	Channel Temperature	150°C
T _{STG}	Storage Temperature	-65/150°C
P _T	Total Power Dissipation	17W

1. Operating the device beyond any of the above rating may result in permanent damage.

 2. Bias conditions must also satisfy the following equation $V_{DS} \cdot I_{DS} < (T_{CH} - T_{HS}) / R_{TH}$; where T_{HS} = ambient temperature

Specifications are subject to change without notice.

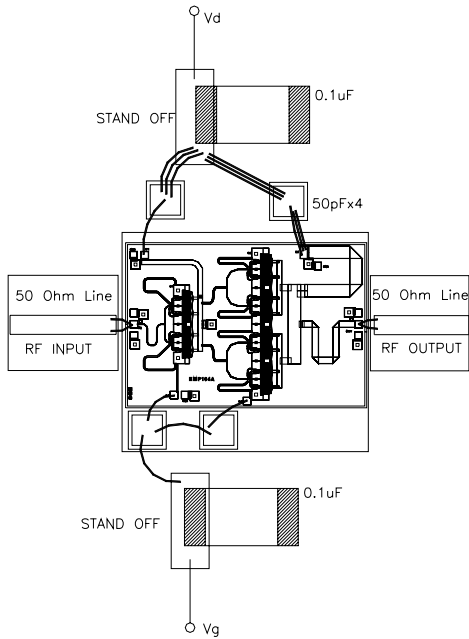
Excelics Semiconductor, Inc. 310 De Guigne Drive, Sunnyvale, CA 94085

 Phone: 408-737-1711 Fax: 408-737-1868 Web: www.excelics.com

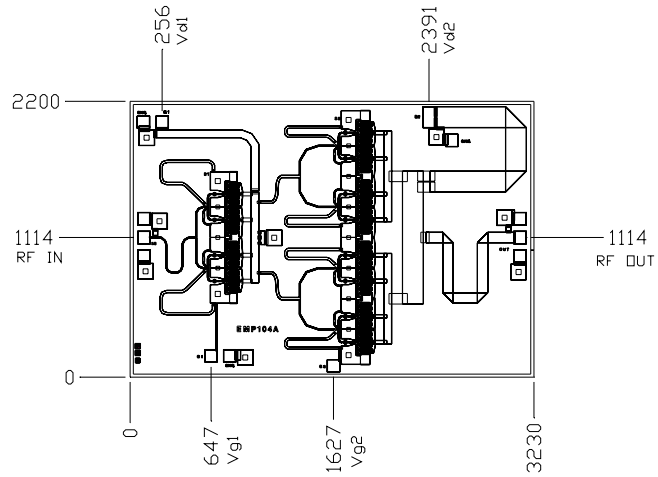
page 1 of 2

Revised April 2008

ASSEMBLY DRAWING

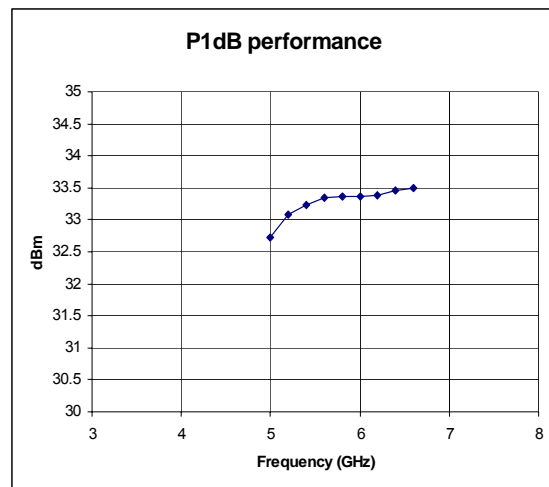
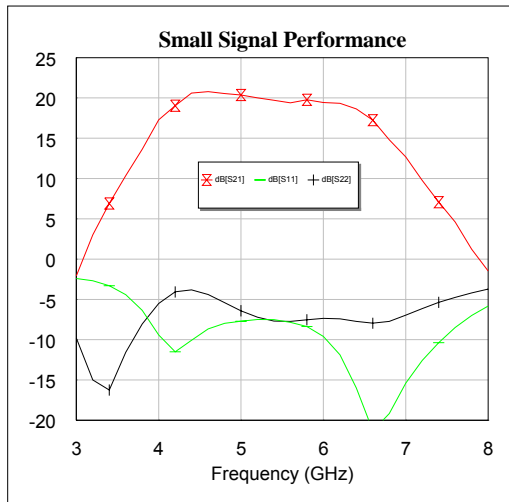


CHIP OUTLINE



All Dimensions in Microns

TYPICAL PERFORMANCE



Data measured @ Vd=10V, Id=950mA