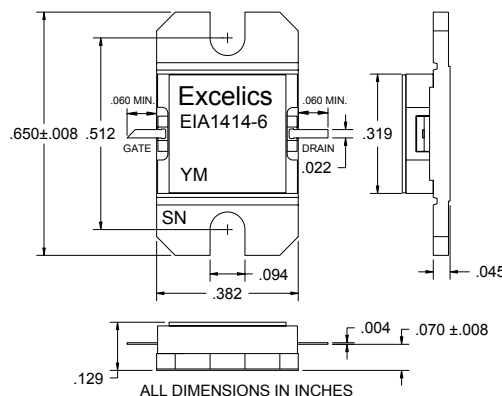


### FEATURES

- 14.00– 14.50GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +37.5 dBm Output Power at 1dB Compression
- 8.0 dB Power Gain at 1dB Compression
- 33% Power Added Efficiency
- Hermetic Metal Flange Package



### ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25°C)



Caution! ESD sensitive device.

SYMBOL	PARAMETERS/TEST CONDITIONS <sup>1</sup>	MIN	TYP	MAX	UNITS
<b>P<sub>1dB</sub></b>	Output Power at 1dB Compression V <sub>DS</sub> = 8 V, I <sub>DSQ</sub> ≈ 1600mA f = 14.00-14.50GHz	36.5	37.5		dBm
<b>G<sub>1dB</sub></b>	Gain at 1dB Compression V <sub>DS</sub> = 8 V, I <sub>DSQ</sub> ≈ 1600mA f = 14.00-14.50GHz	7.0	8.0		dB
<b>ΔG</b>	Gain Flatness V <sub>DS</sub> = 8 V, I <sub>DSQ</sub> ≈ 1600mA f = 14.00-14.50GHz			±0.6	dB
<b>PAE</b>	Power Added Efficiency at 1dB Compression V <sub>DS</sub> = 8 V, I <sub>DSQ</sub> ≈ 1600mA f = 14.00-14.50GHz		33		%
<b>I<sub>d1dB</sub></b>	Drain Current at 1dB Compression f = 14.00-14.50GHz		1800	2100	mA
<b>I<sub>DSS</sub></b>	Saturated Drain Current V <sub>DS</sub> = 3 V, V <sub>GS</sub> = 0 V		2800	3500	mA
<b>V<sub>P</sub></b>	Pinch-off Voltage V <sub>DS</sub> = 3 V, I <sub>DS</sub> = 28mA		-1.0	-2.5	V
<b>R<sub>TH</sub></b>	Thermal Resistance <sup>3</sup>		4.5	5.0	°C/W

Note: 1) Tested with 100 Ohm gate resistor.

2) S.C.L. = Single Carrier Level.

3) Overall Rth depends on case mounting.

### ABSOLUTE MAXIMUM RATING<sup>1,2</sup>

SYMBOLS	PARAMETERS	ABSOLUTE <sup>1</sup>	CONTINUOUS <sup>2</sup>
<b>V<sub>ds</sub></b>	Drain-Source Voltage	12	8V
<b>V<sub>gs</sub></b>	Gate-Source Voltage	-5	-3V
<b>I<sub>ds</sub></b>	Drain Current	I <sub>DSS</sub>	3.5A
<b>I<sub>gsf</sub></b>	Forward Gate Current	43.2mA	14.4mA
<b>I<sub>gsr</sub></b>	Reserve Gate Current	-7.2mA	-2.4mA
<b>P<sub>in</sub></b>	Input Power	36.5dBm	@ 3dB Compression
<b>T<sub>ch</sub></b>	Channel Temperature	175 °C	175 °C
<b>T<sub>stg</sub></b>	Storage Temperature	-65 to +175 °C	-65 to +175 °C
<b>P<sub>t</sub></b>	Total Power Dissipation	30W	30W

Note: 1. Exceeding any of the above ratings may result in permanent damage.

2. Exceeding any of the above ratings may reduce MTTF below design goals.

Specifications are subject to change without notice.

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Revised December 2005