

FEATURES

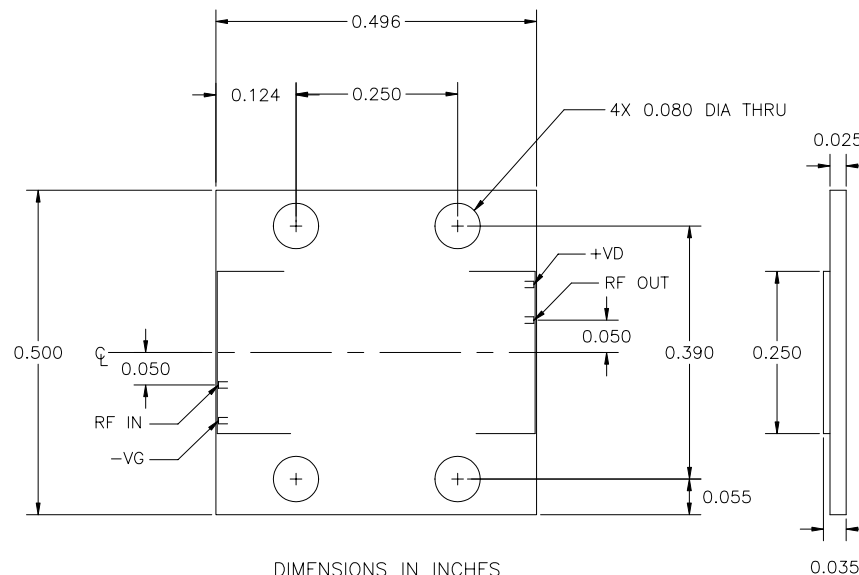
- 6.0 – 18.0 GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +32.0 dBm Output Power at 1dB Compression
- 6.0 dB Power Gain at 1dB Compression
- 25% Power Added Efficiency



Caution! ESD sensitive device.

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETERS/TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{1dB}	Output Power at 1dB Compression $f = 6.0\text{-}18.0\text{GHz}$ $V_{DS} = 8\text{ V}, I_{DQ} \approx 480\text{mA}$	31.0	32.0		dBm
G_{1dB}	Gain at 1dB Compression $f = 6.0\text{-}18.0\text{GHz}$ $V_{DS} = 8\text{ V}, I_{DQ} \approx 480\text{mA}$	5.0	6.0		dB
ΔG	Gain Flatness $f = 6.0\text{-}18.0\text{GHz}$ $V_{DS} = 8\text{ V}, I_{DQ} \approx 480\text{mA}$			± 1.0	dB
VSWR	Input/Output VSWR $f = 6.0\text{-}18.0\text{GHz}$		1.5:1	2.0:1	
PAE	Power Added Efficiency at 1dB Compression $V_{DS} = 8\text{ V}, I_{DQ} \approx 480\text{mA}$ $f = 6.0\text{-}18.0\text{ GHz}$		25		%
I_{d1dB}	Drain Current at 1dB Compression $f = 6.0\text{-}18.0\text{ GHz}$		600	750	mA



OUTLINE DRAWING

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

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Revised October 2005



EIM0618-1.5

UPDATED 10/21/2005

6.0 – 18.0 GHz 1.5-Watt Power Module

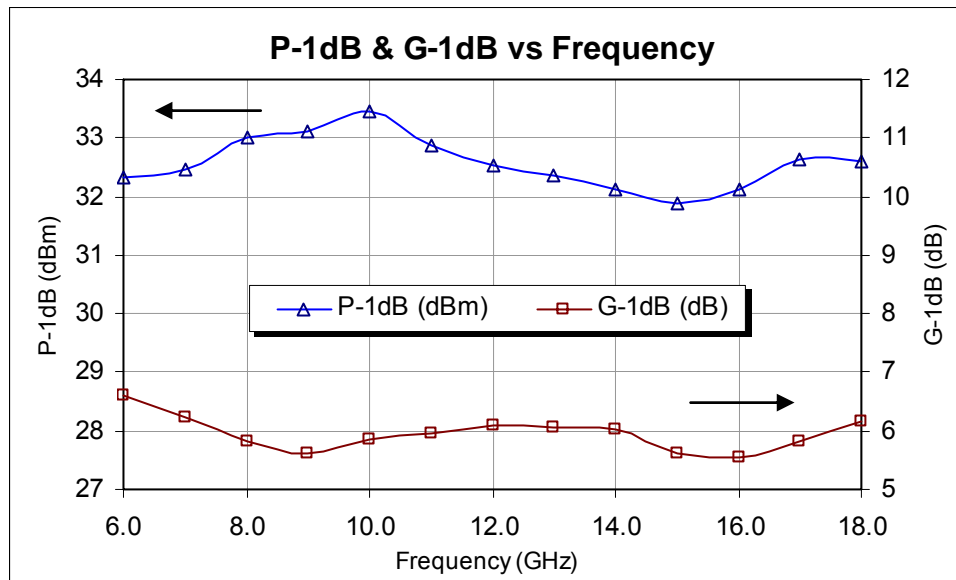
ABSOLUTE MAXIMUM RATINGS FOR CONTINUOUS OPERATION^{1,2}

SYMBOL	CHARACTERISTIC	ABSOLUTE ¹	CONTINUOUS ²
V_{DS}	Drain to Source Voltage	12 V	8 V
V_{GS}	Gate to Source Voltage	-8 V	-3 V
I_{DS}	Drain Current	IDSS	950 mA
I_{GSF}	Forward Gate Current	160 mA	28 mA
P_{IN}	Input Power	31 dBm	@ 3dB compression
P_T	Total Power Dissipation	9.0 W	7.6 W
T_{CH}	Channel Temperature	175°C	150°C
T_{STG}	Storage Temperature	-65/+175°C	-65/+150°C

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.

Typical Power Data ($V_{DS} = 8\text{ V}$, $I_{DSQ} = 480\text{ mA}$)



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