

FEATURES

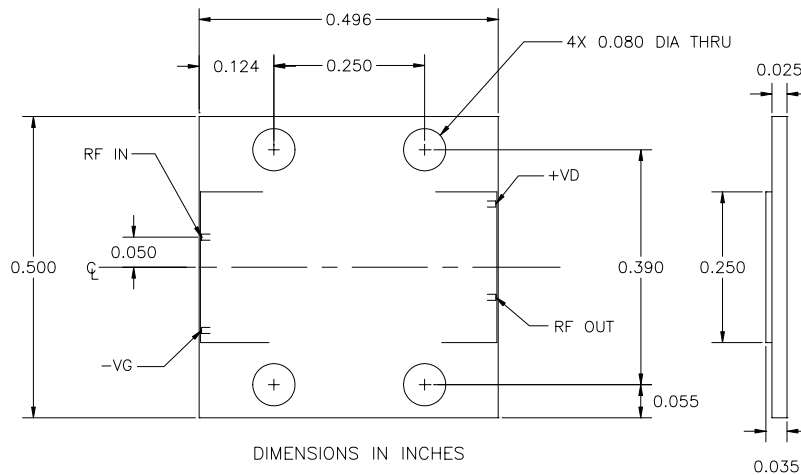
- 6.0 – 18.0 GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +30.0 dBm Output Power at 1dB Compression
- 7.5 dB Power Gain at 1dB Compression
- 30% Power Added Efficiency



Caution! ESD sensitive device.

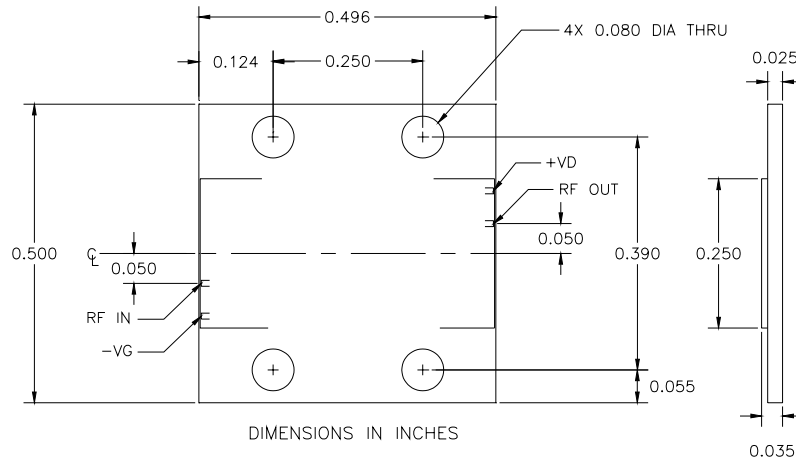
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETERS/TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{1dB}	Output Power at 1dB Compression $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 360\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$	29.0	30.0		dBm
G_{1dB}	Gain at 1dB Compression $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 360\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$	6.5	7.5		dB
ΔG	Gain Flatness $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 360\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$			± 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 $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 360\text{mA}$ $f = 6.0\text{-}18.0\text{ GHz}$		30		%
I_{d1dB}	Drain Current at 1dB Compression $f = 6.0\text{-}18.0\text{ GHz}$		400	500	mA



OUTLINE DRAWING, EIM0618-1Z

Specifications are subject to change without notice.



OUTLINE DRAWING, EIM0618-1S

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	760 mA
I_{GSF}	Forward Gate Current	120 mA	20 mA
P_{IN}	Input Power	30 dBm	@ 3dB compression
P_T	Total Power Dissipation	7.2 W	6.0 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.

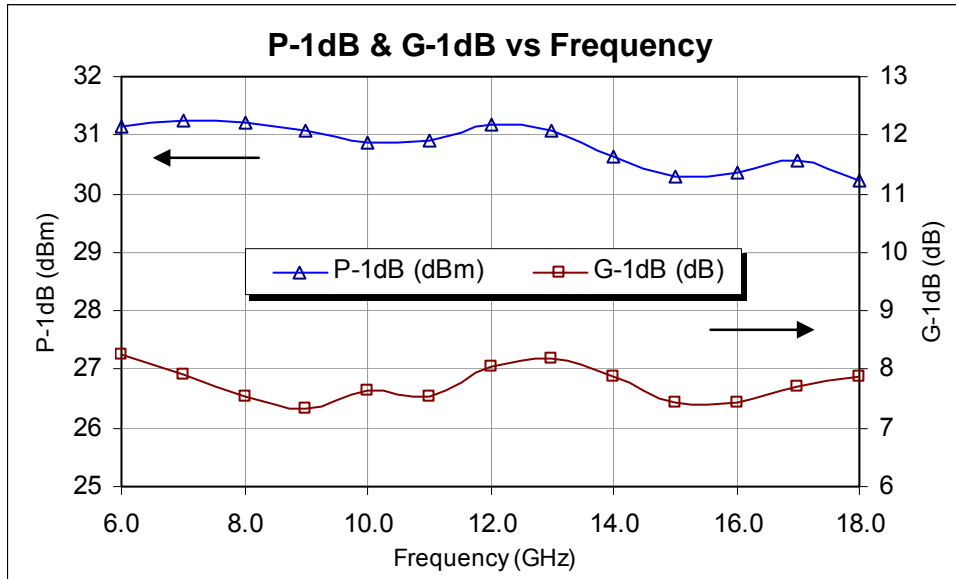


EIM0618-1

UPDATED 07/18/2006

6.0 – 18.0 GHz 1-Watt Power Module

Typical Power Data ($V_{DS} = 8\text{ V}$, $I_{DSQ} = 360\text{ mA}$)



ORDERING INFORMATION

Part Number	
EIM0618-1S	Refer Outline EIM0618-1S
EIM0618-1Z	Refer Outline EIM0618-1Z

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