

FEATURES

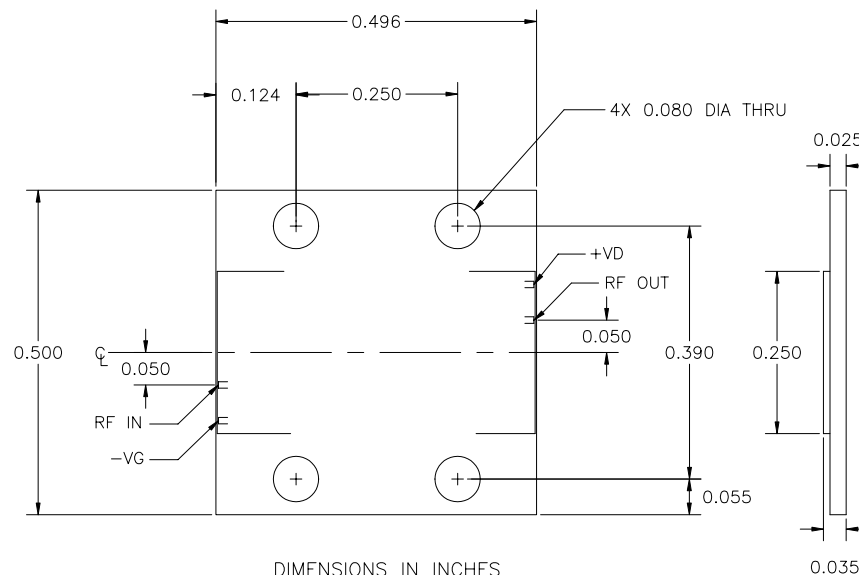
- 6.0 – 18.0 GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +32.0 dBm Output Power at 1dB Compression
- 6.0 dB Power Gain at 1dB Compression
- 25% Power Added Efficiency



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 $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 480\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$	31.0	32.0		dBm
G_{1dB}	Gain at 1dB Compression $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 480\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$	5.0	6.0		dB
ΔG	Gain Flatness $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 480\text{mA}$ $f = 6.0\text{-}18.0\text{GHz}$			± 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 $V_{DS} = 8\text{ V}$, $I_{DQ} \approx 480\text{mA}$ $f = 6.0\text{-}18.0\text{ GHz}$		25		%
I_{d1dB}	Drain Current at 1dB Compression $f = 6.0\text{-}18.0\text{ GHz}$		600	750	mA



DIMENSIONS IN INCHES
 OUTLINE DRAWING

Specifications are subject to change without notice.



EIM0618-1.5

UPDATED 10/21/2005

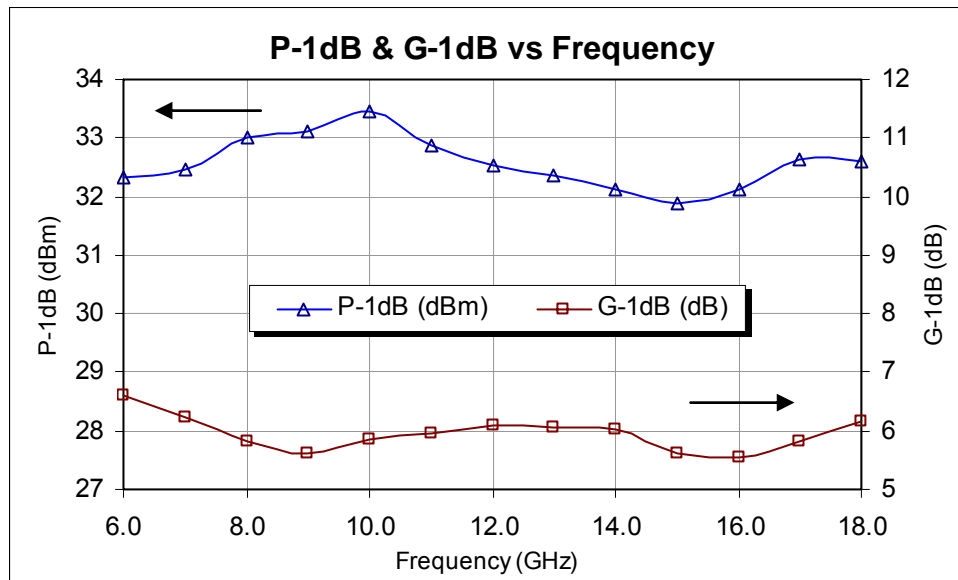
6.0 – 18.0 GHz 1.5-Watt Power Module

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 V, I_{DSQ} = 480 mA)



Specifications are subject to change without notice.