

FEATURES

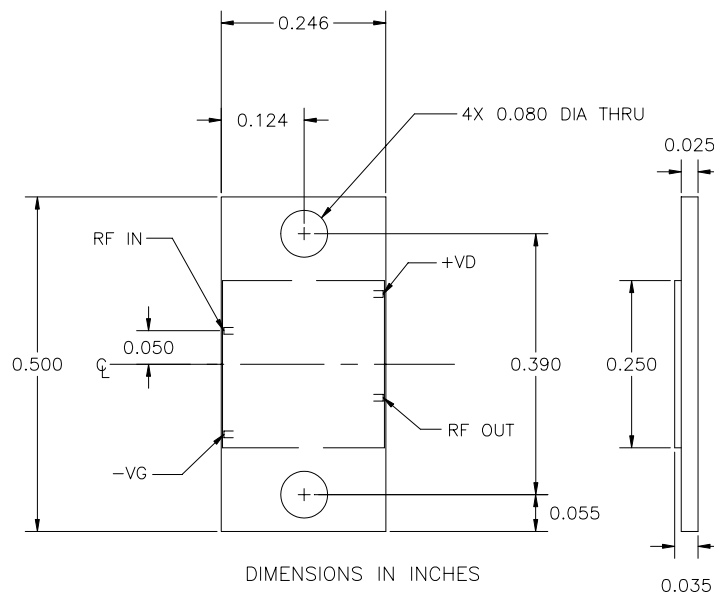
- 6.0 – 18.0 GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +27.0 dBm Output Power at 1dB Compression
- 8.5 dB Power Gain at 1dB Compression
- 30% Power Added Efficiency



Caution! ESD sensitive device.

ELECTRICAL CHARACTERISTICS (T_a = 25°C)

SYMBOL	PARAMETERS/TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _{1dB}	Output Power at 1dB Compression V _{DS} = 8 V, I _{DQ} ≈ 180mA f = 6.0-18.0GHz	26.0	27.0		dBm
G _{1dB}	Gain at 1dB Compression V _{DS} = 8 V, I _{DQ} ≈ 180mA f = 6.0-18.0GHz	7.5	8.5		dB
ΔG	Gain Flatness V _{DS} = 8 V, I _{DQ} ≈ 180mA f = 6.0-18.0GHz			±1.0	dB
VSWR	Input/Output VSWR f = 6.0-18.0GHz		1.5:1	2.0:1	
PAE	Power Added Efficiency at 1dB Compression V _{DS} = 8 V, I _{DQ} ≈ 180mA f = 6.0-18.0 GHz		30		%
I _{d1dB}	Drain Current at 1dB Compression f = 6.0-18.0 GHz		200	250	mA



OUTLINE DRAWING

Specifications are subject to change without notice.



EIM0618-0.5

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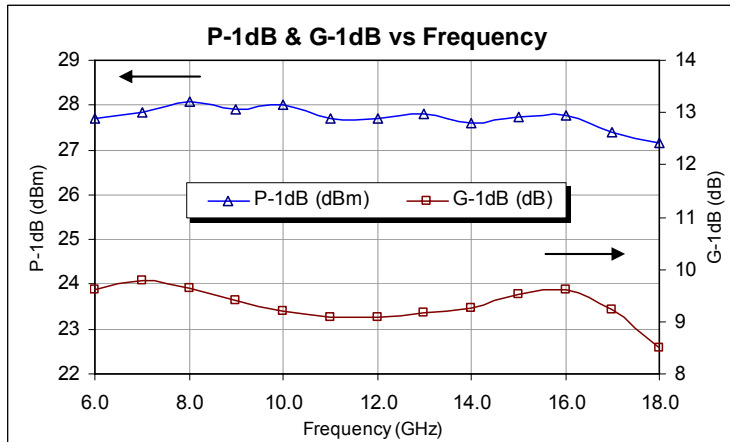
6.0 – 18.0 GHz ½-Watt Power Module

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	380 mA
I _{GSF}	Forward Gate Current	60 mA	10 mA
P _{IN}	Input Power	27 dBm	@ 3dB compression
P _T	Total Power Dissipation	3.6 W	3.0 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.

Typical Power Data (V_{DS} = 8 V, I_{DSQ} = 180 mA)



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page 2 of 2
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