

DESCRIPTION

AMCOM's AM183031WM-Q4-R is part of the GaAs MMIC power amplifier series. It has 30dB gain, 31dBm output power over the 1.8 to 3.4GHz band. This MMIC is in a plastic package with both RF and DC leads at the bottom level of the package to facilitate low-cost SMT assembly to the PC board. This MMIC is RoHS compliant.

FEATURES

- Wide bandwidth from 1.8 to 3.4GHz
- High output power, P1dB = 31dBm
- High gain, 30dB
- Fully matched, 50-ohm input/output impedance

APPLICATIONS

- Wireless Internet Access
- Wireless Local Loop
- Broadband Wireless Access (BWA)

PERFORMANCE* ($V_{ds} = 8V$, $I_{dq} = 670mA$, $T_a = 25^{\circ}C$)

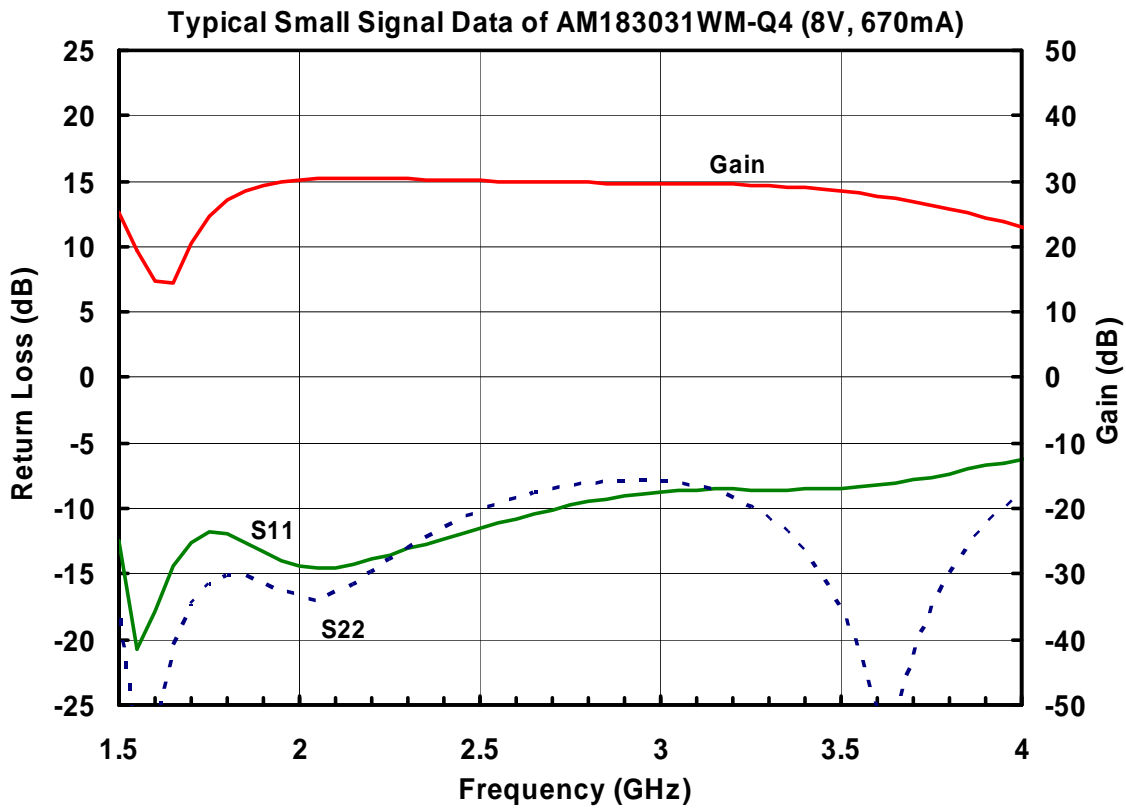
Parameters	Minimum	Typical	Maximum
Frequency	2.0 – 3.0GHz	1.8 – 3.4GHz	
Gain (Small signal)	27dB	30dB	
Gain Ripple		± 1.0dB	± 2.0dB
P1dB	29.0dBm	31.0dBm	
P3dB	30.0dBm	32.0dBm	
IP3	35.0dBm	39.0dBm	
Efficiency @ P1dB		25%	
Input Return Loss	8dB	10dB	
Output Return Loss	7dB	9dB	
Thermal Resistance		11.7°C/W	

*Specifications subject to change without notice.

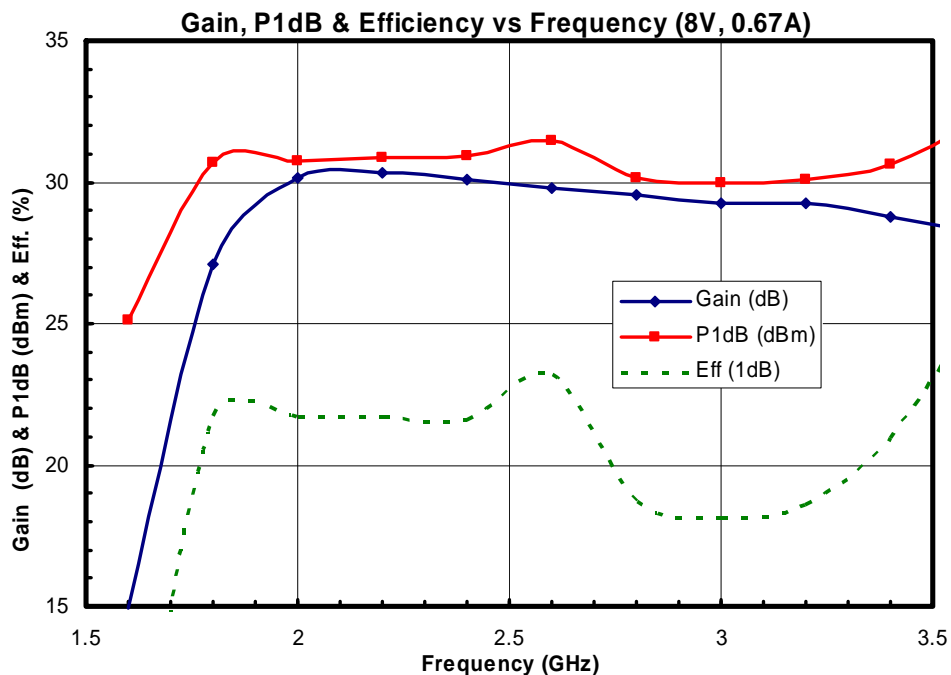
ABSOLUTE MAXIMUM RATING

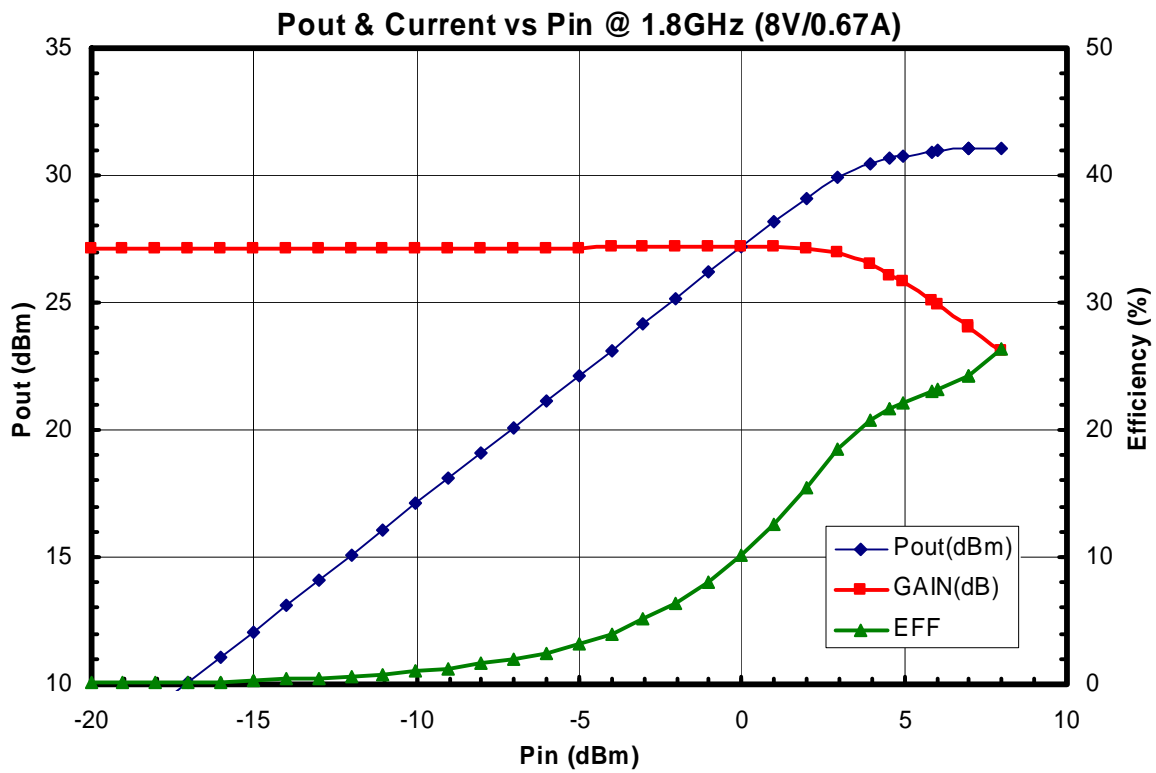
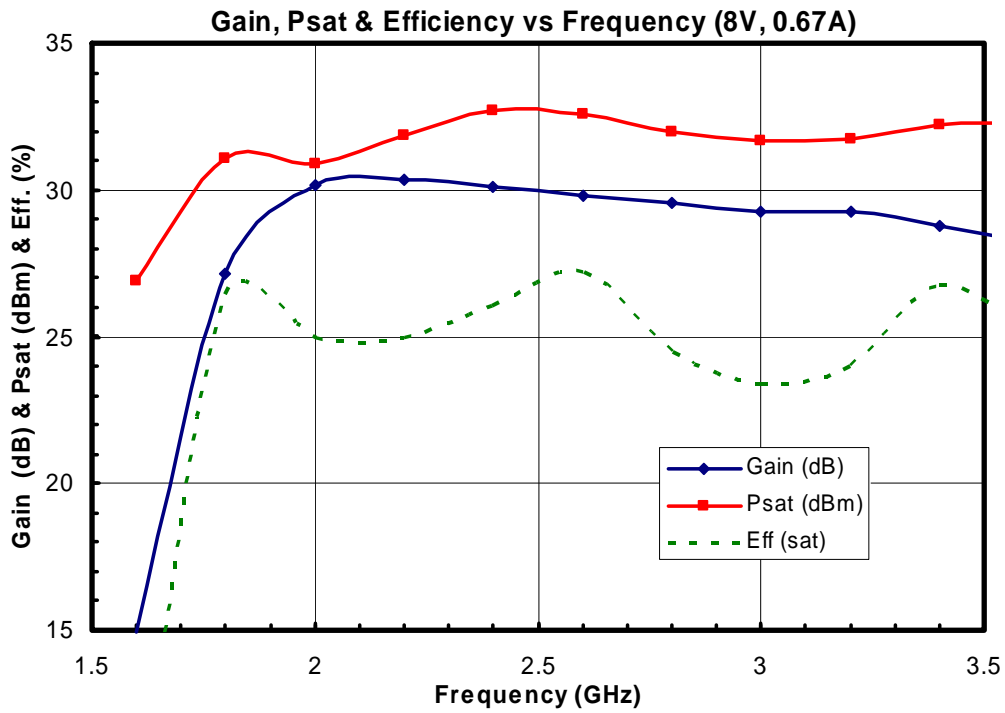
Parameters	Symbol	Rating
Drain source voltage	V_{ds}	10V
Gate source voltage	V_{gs}	-5V
Drain source current	I_{ds}	1.3A
Continuous dissipation at room temperature	P_t	12.8W
Channel temperature	T_{ch}	175°C
Storage temperature	T_{sto}	-55°C to +135°C

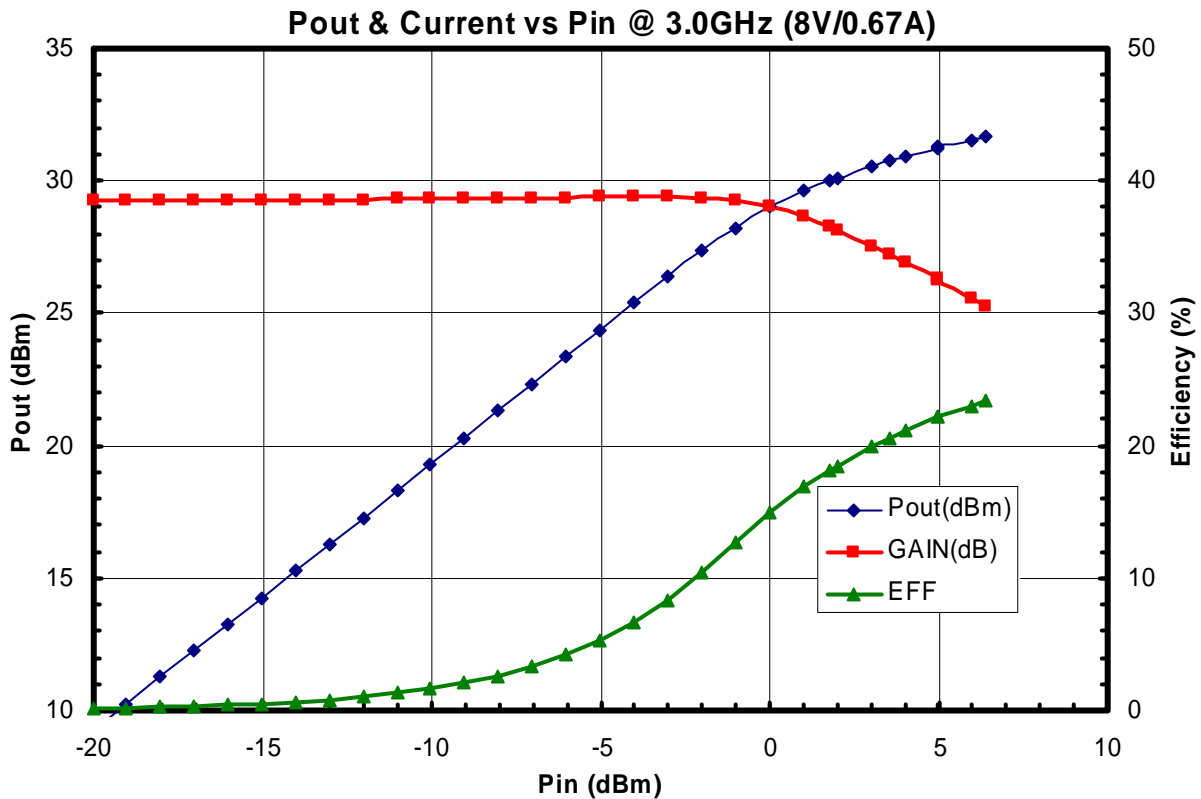
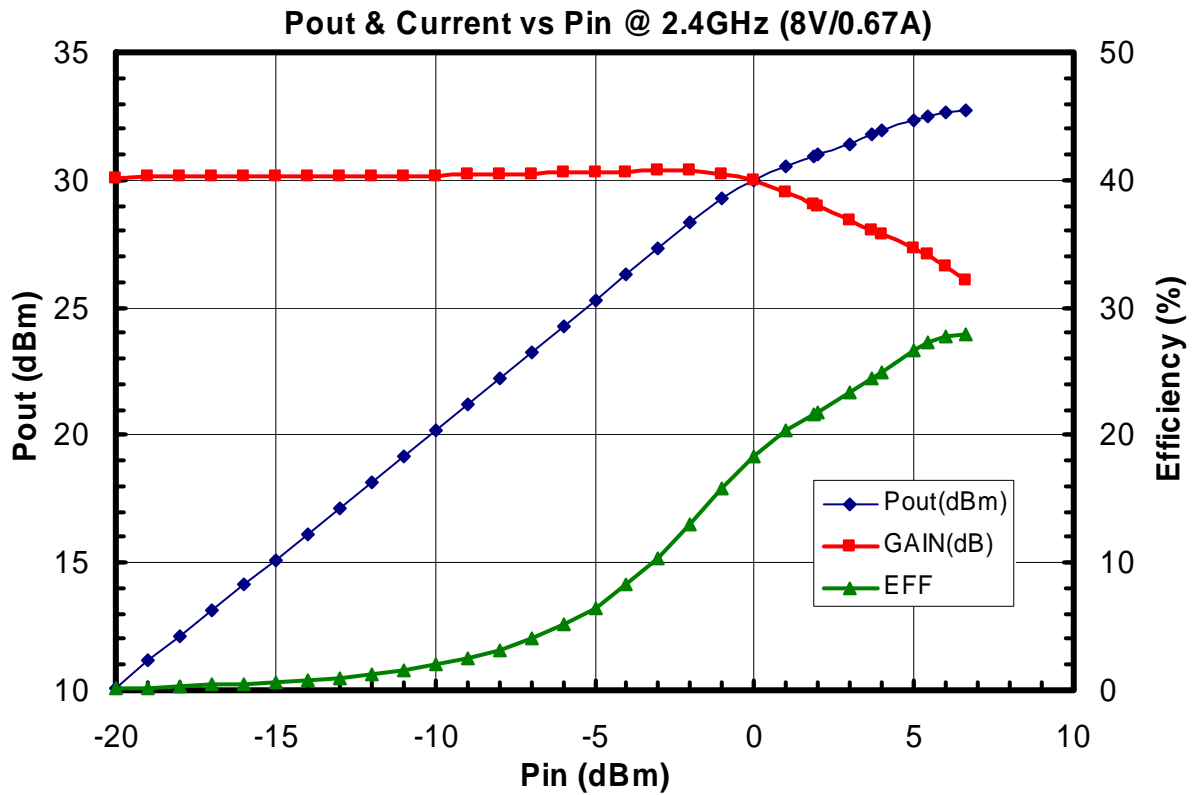
SMALL SIGNAL DATA



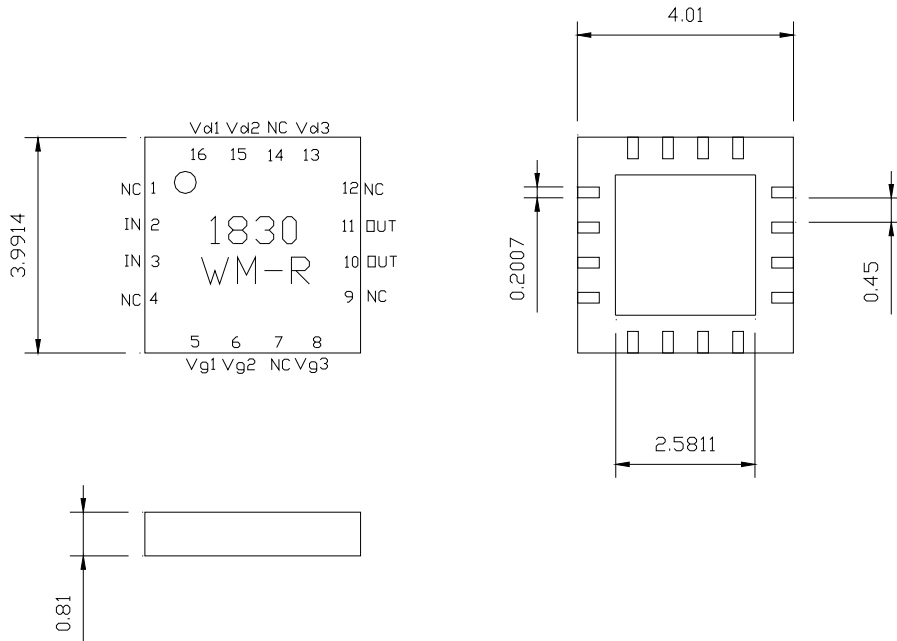
POWER DATA







PACKAGE OUTLINE



All dimensions in mm