



High Dynamic Range GaAs Amplifier, 800 - 2500 MHz

V 3A.00

Advanced

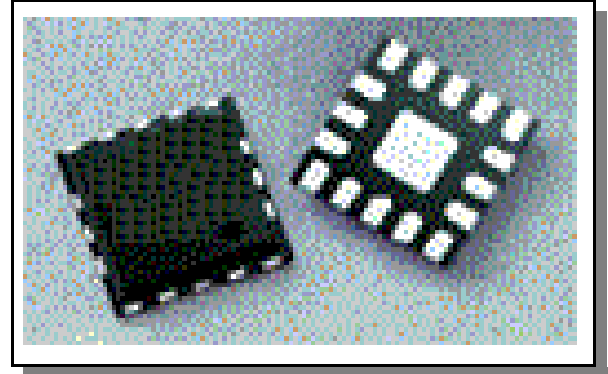
MAAMSS0007

Features

- Greater than 40 dBm Output IP3
- Greater than 20 dBm P1dB
- Chip Scale Leadless Package
- Single Positive Supply Voltage

Description

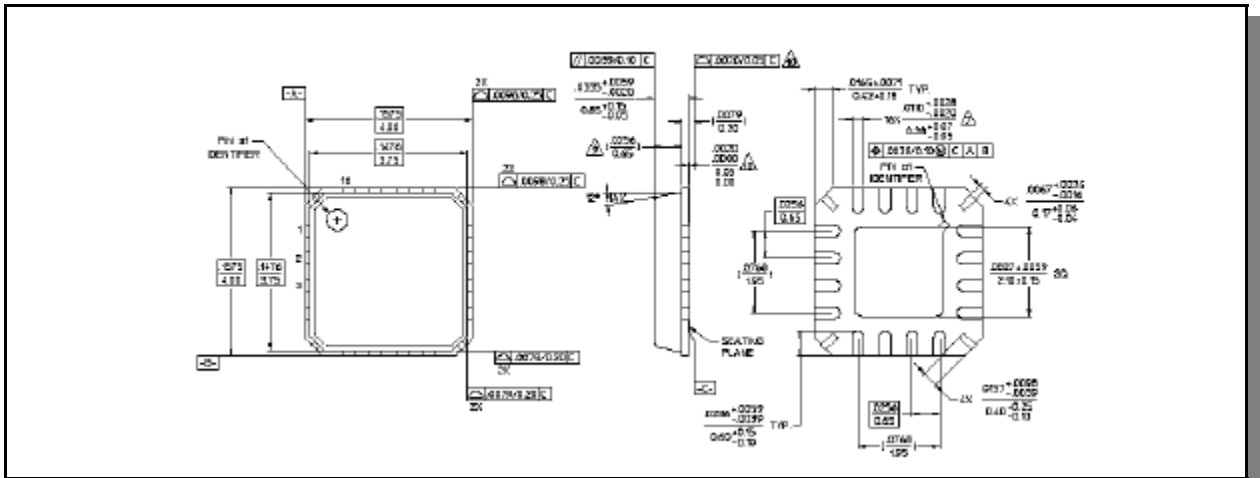
M/A-COM's MAAMSS0007 Amplifier is a high linearity and high efficiency GaAs MMIC in a plastic surface mount package. It is ideal for receiver and transmitter applications due to its low noise figure and high OIP3. The MAAMSS0007 is particularly useful in applications requiring high linearity.



Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

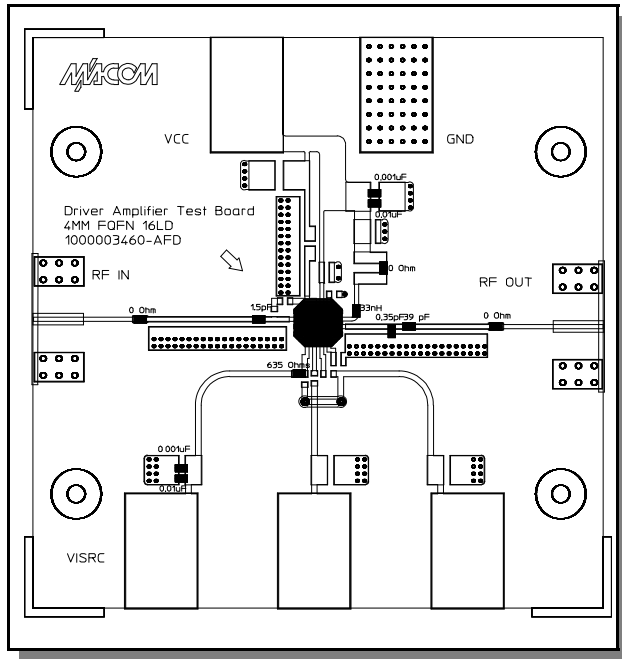
| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
|--------------------|-----------------|----------------|-------|-----|-----|-----|
| Gain | | 800 - 2500 MHz | dB | — | 13 | — |
| Input Return Loss | | 800 - 2500 MHz | dB | — | -10 | — |
| Output Return Loss | | 800 - 2500 MHz | dB | — | -15 | — |
| Output IP3 | | 800 - 2500 MHz | dBm | — | 41 | — |
| Output P1dB | | 800 - 2500 MHz | dBm | — | 23 | — |
| Noise Figure | | 800 - 2500 MHz | dB | — | 4.5 | — |
| Supply Voltage | | 800 - 2500 MHz | V | — | 5 | — |
| Supply Current | | 800 - 2500 MHz | mA | — | 100 | — |

4mm FQFP-N Package

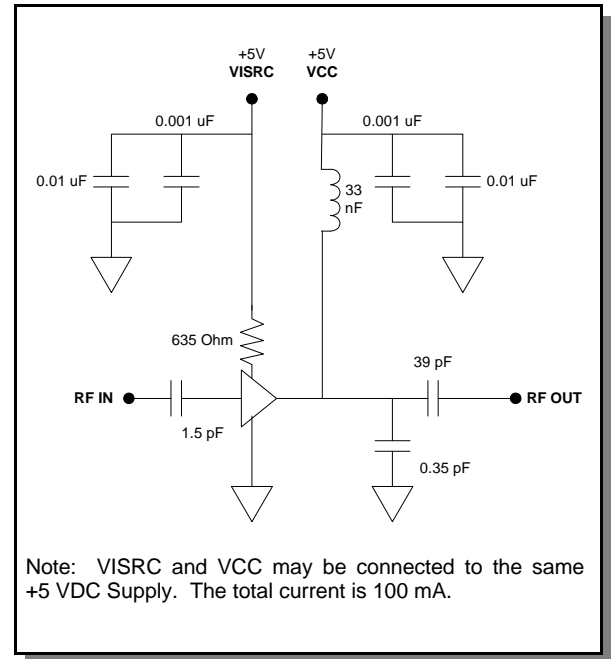


This Advanced Data Sheet contains technical information about a product M/A-COM may introduce. Specifications subject to change prior to formal introduction. All measurements in a 50 Ohm System.

Sample Board Layout for 1800 - 2300 MHz

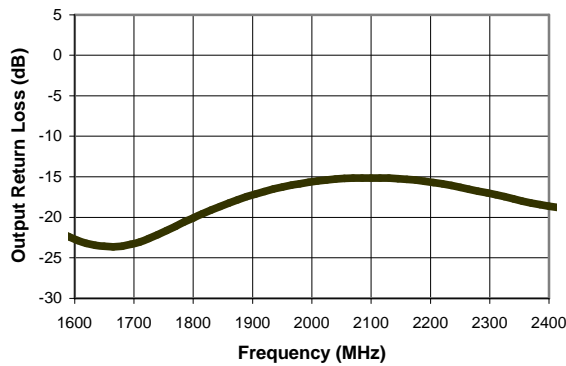


Schematic Including Off-Chip Components for 1800 - 2300 MHz

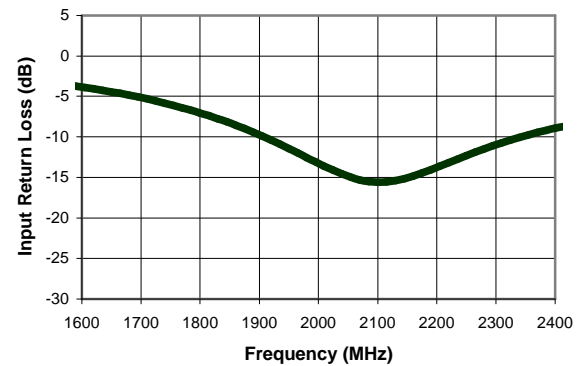


Typical Performance Curves

Output Return Loss vs. Frequency



Input Return Loss vs. Frequency



Specifications subject to change without notice.

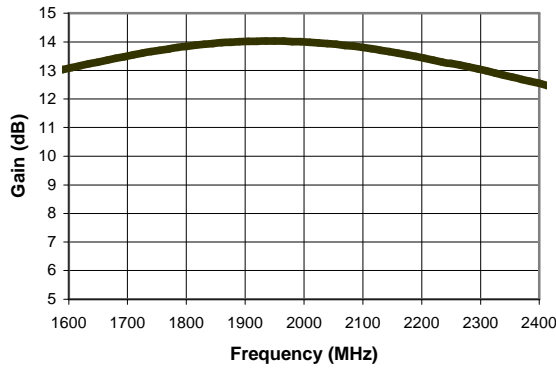
- North America: Tel. (800) 366-2266
- Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298
- Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

Visit www.macom.com for additional data sheets and product information.

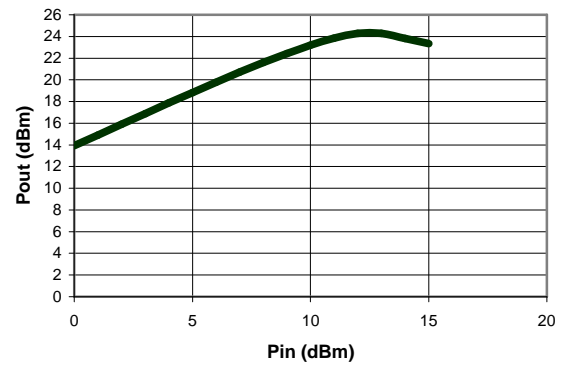


Typical Performance Curves

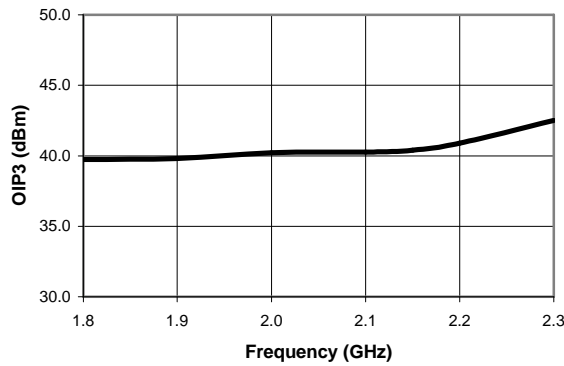
Gain vs. Frequency



Pout vs. Pin at 2150 MHz



OIP3 vs. Frequency



Ordering Information

| Part Number | Package |
|---------------|-----------------------------|
| MAAMSS0007 | Bulk Packaging |
| MAAMSS0007TR | Tape and Reel (1K Reel) |
| MAAMSS0007-TB | Units Mounted on Test Board |

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