



High Output IP3 Driver Amplifier, 1700 - 2500 MHz

V 1P.00

Preliminary

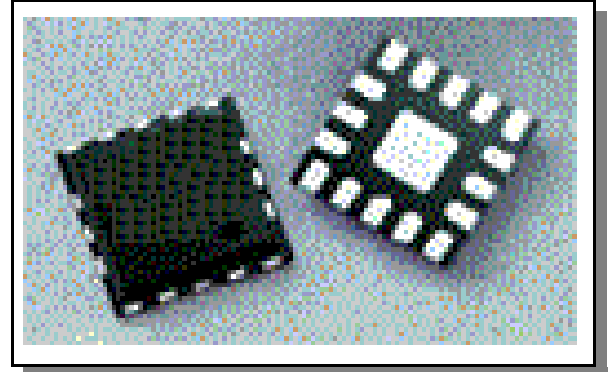
MAAMSS0007

Features

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

Description

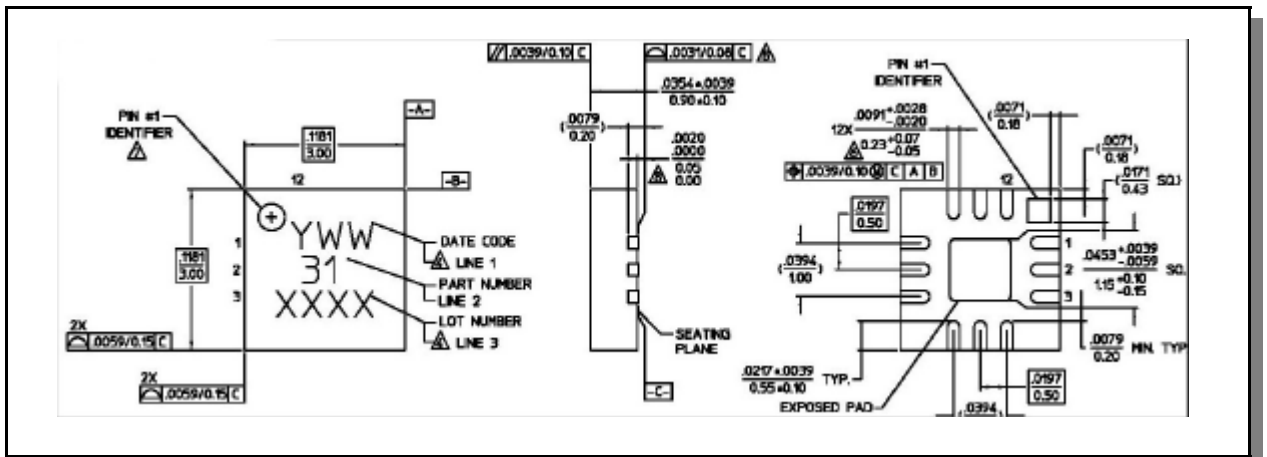
M/A-COM's MAAMSS0007 Amplifier is a high linearity and high efficiency *iHBT*® MMIC in a 3mm FQFP-N plastic surface mount package. The MAAMSS0007 is particularly useful in applications requiring high linearity.



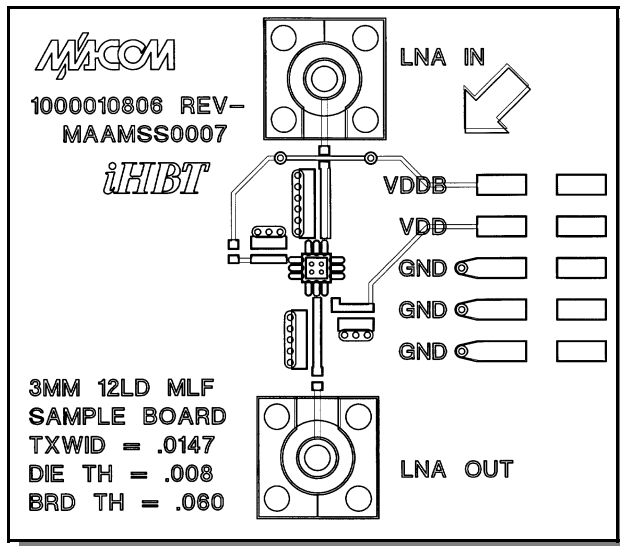
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
|--------------------|-----------------|-----------------|-------|-----|-----|-----|
| Gain | | 1700 - 2500 MHz | dB | — | 13 | — |
| Input Return Loss | | 1700 - 2500 MHz | dB | — | -10 | — |
| Output Return Loss | | 1700 - 2500 MHz | dB | — | -15 | — |
| Output IP3 | | 1700 - 2500 MHz | dBm | — | 41 | — |
| Output P1dB | | 1700 - 2500 MHz | dBm | — | 23 | — |
| Noise Figure | | 1700 - 2500 MHz | dB | — | 5.5 | — |
| Supply Voltage | | 1700 - 2500 MHz | V | — | 5 | — |
| Supply Current | | 1700 - 2500 MHz | mA | — | 100 | — |

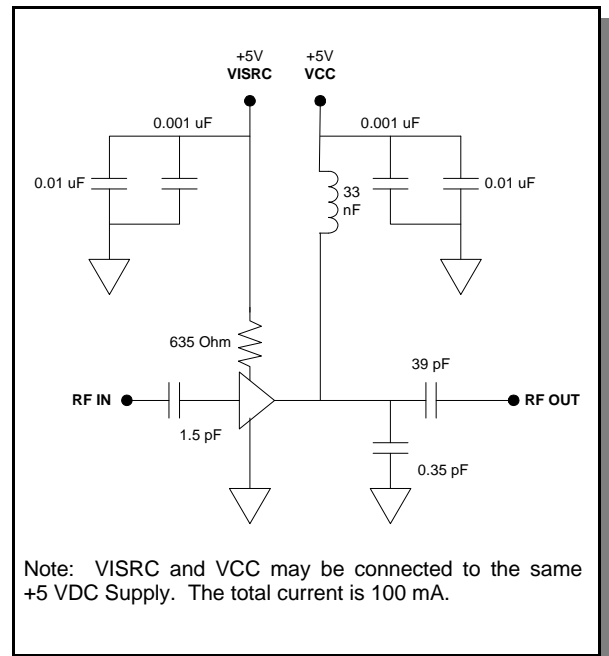
3mm FQFP-N Package



Sample Board Layout for 1800 - 2300 MHz

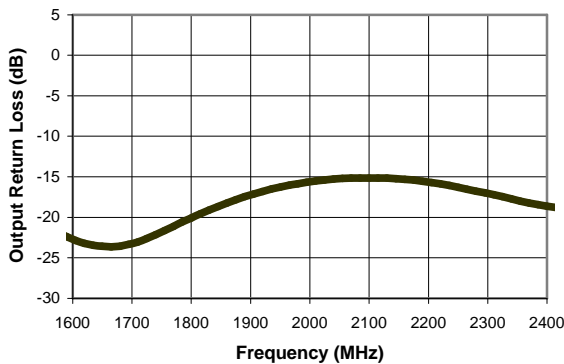


Schematic Including Off-Chip Components for 1800 - 2300 MHz

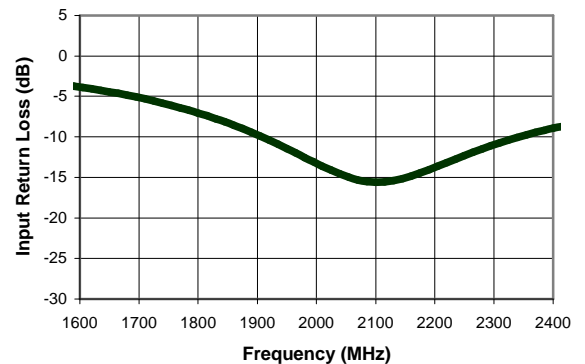


Typical Performance Curves

Output Return Loss vs. Frequency



Input Return Loss vs. Frequency



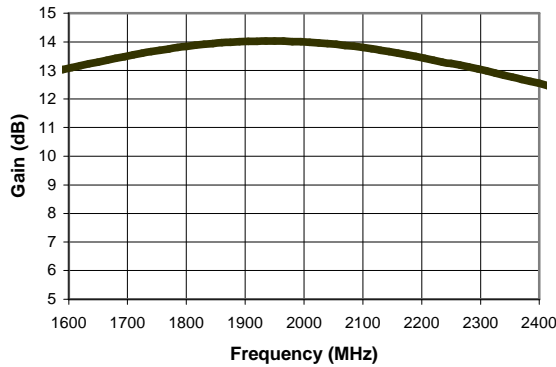
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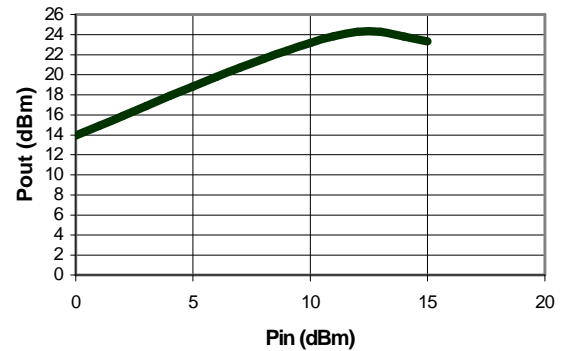
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- Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298
- Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

Typical Performance Curves

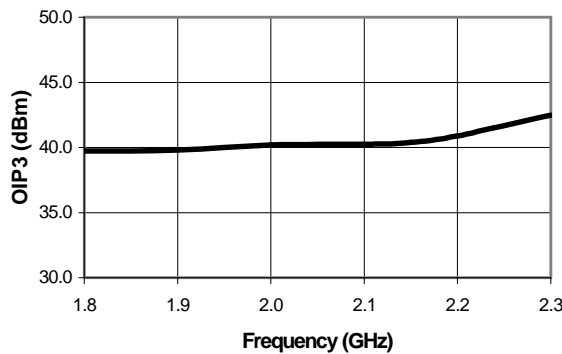
Gain vs. Frequency



Pout vs. Pin at 2150 MHz



OIP3 vs. Frequency



Ordering Information

| Part Number | Package |
|-----------------|-------------------------|
| MAAMSS0007 | Bulk Packaging |
| MAAMSS0007SMB | Sample Kit |
| MAAMSS0007TR | Tape and Reel (1K Reel) |
| MAAMSS0007-3000 | Tape and Reel (3K Reel) |

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