

Electrical Specifications: ² T_A = -55°C to +85°C Case Temperature

| Parameter | Test Conditions | Frequency | Units | Min. | Typ. | Max. |
|---------------------------------|-----------------------------|--------------|-------|-------|-------|-------|
| Gain | @+25°C | 50 MHz | dB | 12.0 | 12.5 | 13.0 |
| Frequency Response | — | 10 - 100 MHz | dB | — | — | ±0.6 |
| Gain Variation with Temperature | — | 10 - 100 MHz | dB | — | — | ±0.6 |
| 1 dB Compression | Output Power | 10 - 100 MHz | dBm | +13 | — | — |
| Noise Figure | — | 10 - 100 MHz | dB | — | — | 1.6 |
| Reverse Transmission | — | 10 - 100 MHz | dB | — | -15 | -14 |
| VSWR | — | 10 - 100 MHz | Ratio | — | — | 2.0:1 |
| Output IP ₂ | Two-Tone inputs up to 0 dBm | 10 - 100 MHz | dBm | +40 | — | — |
| Output IP ₃ | Two-Tone inputs up to 0 dBm | 10 - 100 MHz | dBm | +26 | — | — |
| Vbias | — | — | VDC | +14.5 | +15.0 | +15.5 |
| Ibias | Vbias = +15.0 VDC | — | mA | — | 11 | 15 |
| Power Dissipation | @ +15 V Bias | — | mW | — | 165 | — |

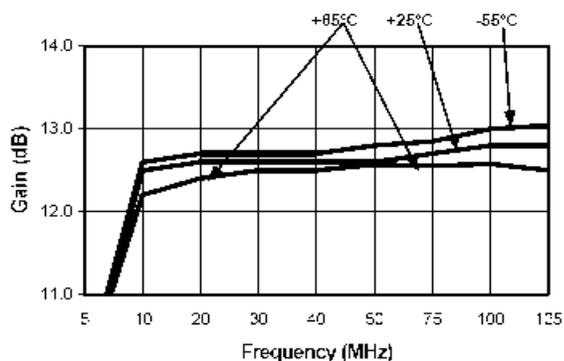
2. All specifications apply when operated at +15 VDC, with 50 ohms source and load impedance.

S-Parameter Data

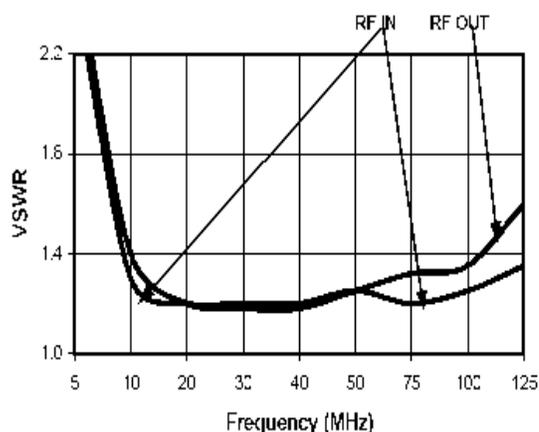
| Frequency (MHz) | S11 MAG/ANG | S21 MAG/ANG | S12 MAG/ANG | S22 MAG/ANG |
|-----------------|-------------|-------------|-------------|-------------|
| 10 | 0.07/165 | 4.06/66 | 0.18 | 0.09/169.1 |
| 20 | 0.09/-166.8 | 4.13/-6.5 | 0.17 | 0.09/-159.2 |
| 30 | 0.08/-151.5 | 4.18/-15.8 | 0.17 | 0.09/-129.5 |
| 40 | 0.10/-146.9 | 4.20/-24.0 | 0.17 | 0.11/-120.3 |
| 50 | 0.11/-147.9 | 4.23/-32.2 | 0.17 1 | 0.12/-117.7 |
| 60 | 0.11/-152.0 | 4.19/-39.8 | 0.17 | 0.13/-118.5 |
| 70 | 0.12/-159.7 | 4.20/-47.7 | 0.17 | 0.14/-120.3 |
| 85 | 0.12/-171.2 | 4.17/-59.5 | 0.16 | 0.14/-122.6 |
| 100 | 0.12/174.1 | 4.15/-72.1 | 0.16 | 0.15/-123.6 |

Typical Performance Curves

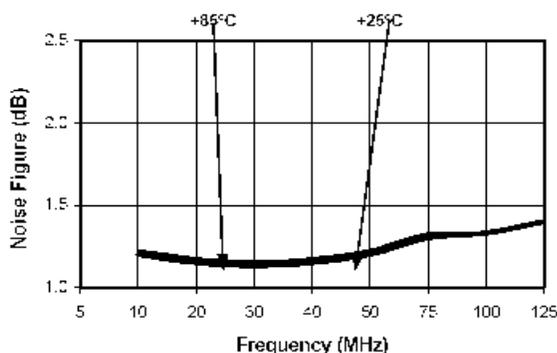
Gain vs. Frequency



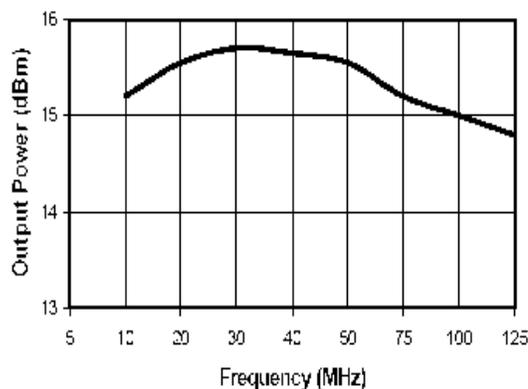
VSWR vs. Frequency



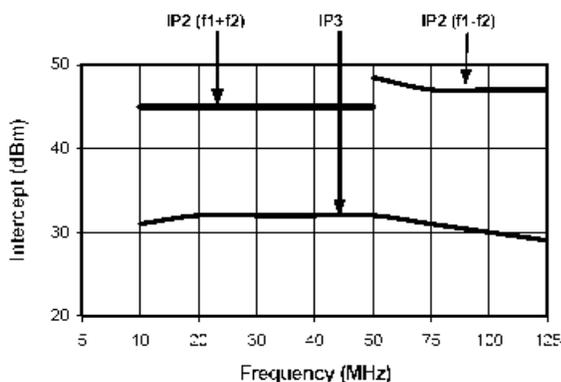
Noise Figure



1 dB Compression



Intermodulation Intercept



Ordering Information

| Part Number | Package |
|----------------|---------------|
| AM-162 PIN | TO-8-1 |
| AMC-162 SMA ** | Connectorized |
| AMS-162 PIN | SF-1 |

** The connectorized version is not RoHS compliant.