# RF AMPLIFIER
# MODEL *TM7105*

**Available as:** TM7105, 4 Pin TO-8 (T4)
TN7105, 4 Pin Surface Mount (SM3)
FP7105, 4 Pin Flatpack (FP4)
BX7105,Connectorized Housing (H1)

## Features

- Medium Gain: 15 dB Typical
- Low Noise Figure: 2.5 dB Typical
- Operating Temp. -55 ºC to +85 ºC
- Environmental Screening Available

## Specifications

| CHARACTERISTIC | TYPICAL Ta= 25 ºC | MIN/MAX Ta = -55 ºC to +85 ºC |
|---|---|---|
| Frequency | 1 - 250 MHz | 1 - 150 MHz |
| Gain (dB) | 15.0 | 13.5 Min. |
| Gain Flatness (dB) | ±0.4 | ±0.7 Max. |
| Power @ 1 dB Comp. (dBm) | +15 | +14 Min. |
| Reverse Isolation (dB) | -18.5 | -18 Max. |
| VSWR In | <1.6:1 | 2.0:1 Max. |
| VSWR Out | <1.6:1 | 2.0:1 Max. |
| Noise Figure (dB)* | 2.5 | 3.5 Max. |
| Power Vdc | +5 | +5 Min. |
| Power mA | 35 | 45 Max. |

## Typical Intermodulation Performance at 25 ºC

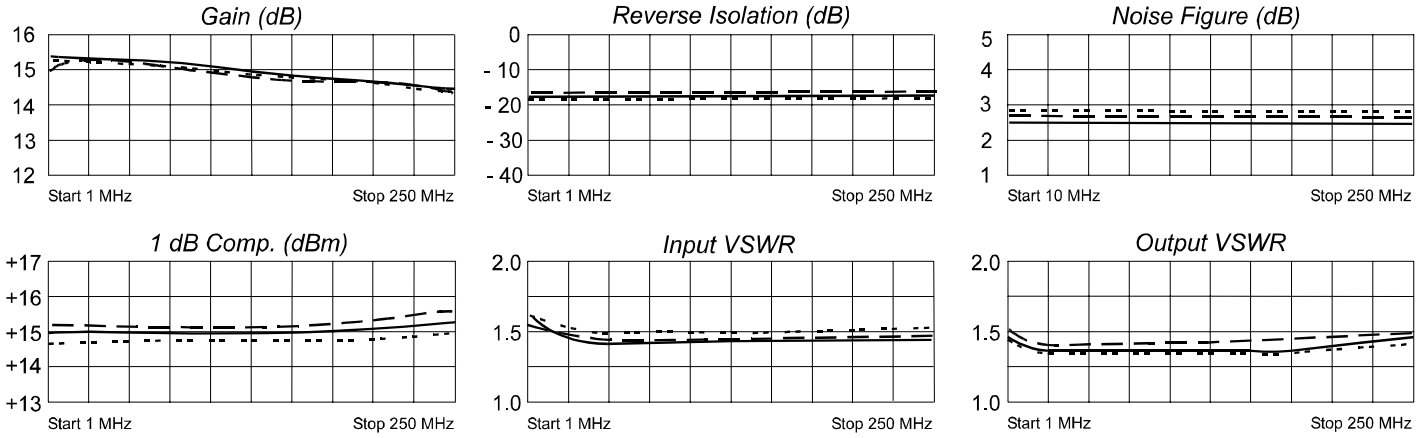
Second Order Harmonic Intercept Point..... +46 dBm (Typ.)
Second Order Two Tone Intercept Point..... +42 dBm (Typ.)
Third Order Two Tone Intercept Point..... +30 dBm (Typ.)

## Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55ºC to +100 ºC
Storage Temperature ..... -62ºC to +125 ºC
Case Temperature ..... +125 ºC
DC Voltage ..... +12 Volts
Continuous RF Input Power ..... +15 dBm
Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

**NOTES:** Care should always be taken to effectively ground the case of each unit. If DC is present on RF input/output, this model requires additional external blocking capacitors.
*Noise Figure measured at 10 to 150 MHz.

## Typical Performance Data




*Legend* ——— *+25 ºC* – – – *+85 ºC* - - - - - - *-55 ºC*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