

# RF AMPLIFIER

## MODEL *TM5841*

**Available as:** TM5841, 4 Pin TO-8 (T4)  
 TN5841, 4 Pin Surface Mount (SM3)  
 FP5841, 4 Pin Flatpack (FP4)  
 BX5841, Connectorized Housing (H1)

### Features

- Low Noise Figure: 1.5 dB Typical
- High Gain: 19 dB Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-100 MHz	5-100 MHz
Gain (dB)	19 ± 0.5	18 Min./ 20 Max.
Power @ 1 dB Comp. (dBm)	+4.5	+3 Min.
Reverse Isolation (dB)	-33	-30 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise figure (dB)	1.5	1.8 Max.
Power Vdc	+15	+15
mA	13	15 Max.

Note: Care should always be taken to effectively ground the case of each unit.

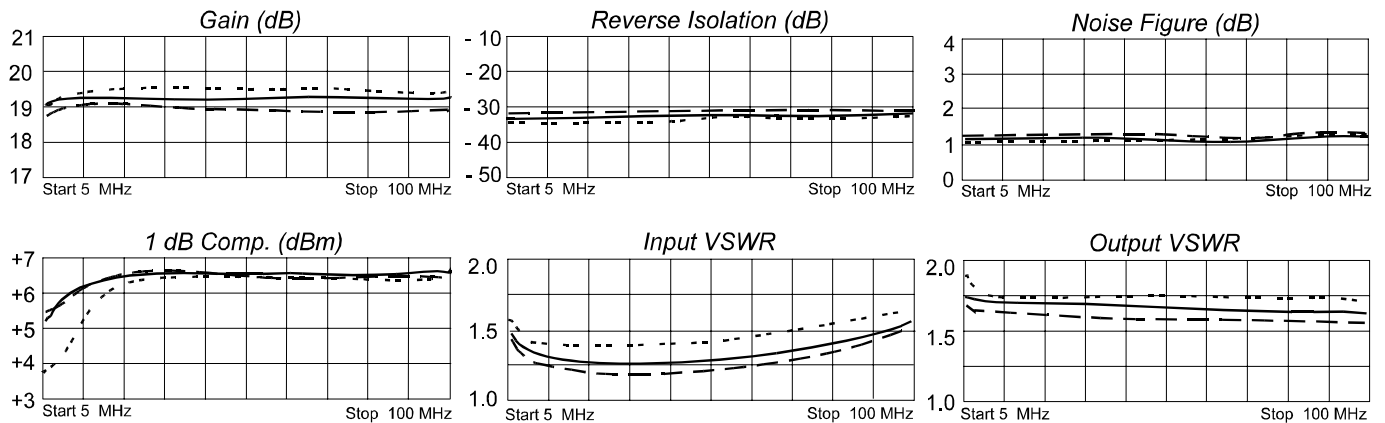
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +29 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +24 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +17 dBm (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +20 Volts  
 Continuous RF Input Power ..... +13 dBm  
 Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 μsec Max.)

### Typical Performance Data



Legend ——— +25 °C    - - - +85 °C    ····· -55 °C

