

# RF AMPLIFIER

## MODEL *TM5141*

Available as: TM5141, 4 Pin TO-8 (T4)  
 TN5141, 4 Pin Surface Mount (SM3)  
 FP5141, 4 Pin Flatpack (FP4)  
 BX5141, SMA Connectorized Housing (H1)  
 (BX5141 Replaces the obsolete QBH-9-141)

### Features

- High Gain: +19.5 dB Typical
- Low Noise: 2.9 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	10 - 300 MHz	10 - 300 MHz
Gain (dB)	19.5	19 Min.
Power @ 1 dB Comp. (dBm)	+7.5	+6.5 Min.
Reverse Isolation (dB)	-23	-
VSWR In	1.50:1	1.75:1 Max.
Out	1.60:1	1.75:1 Max.
Noise figure (dB)	2.9	3.3 Max.
Power Vdc	+15	+15
mA	15	20 Max.

Note: Care should always be taken to effectively ground the case of each unit.  
 Revision 3/12/2013

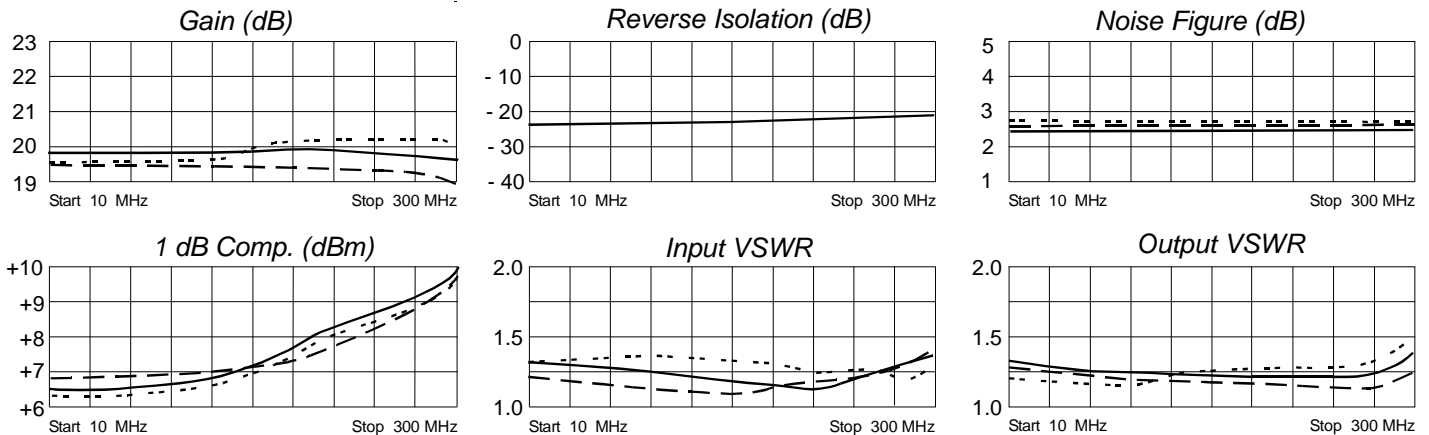
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +30 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +26 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +20 dBm (Typ.)

### Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 18 Volts  
 Continuous RF Input Power ..... + 13 dBm  
 Short Term RF Input Power.....50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 μsec Max.)

### Typical Performance Data



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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532

www.SpectrumMicrowave.com Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001