

# RF AMPLIFIER

## MODEL *TM5538*

Available as: TM5538, 4 Pin TO-8 (T4)  
 TN5538, 4 Pin Surface Mount (SM3)  
 FP5538, 4 Pin Flatpack (FP4)  
 BX5538, Connectorized Housing (H1)

### Features

- High Output Power: +25 dBm Typical
- Low Noise Figure: 2.7 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 - 150 MHz	5 - 150 MHz
Gain (dB)	15.0	14.0 Min.
Power @ 1 dB Comp. (dBm)	+25.0	+23.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.50:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise Figure (dB)	2.7	3.5 Max.
Power Vdc	+15	+15
mA	88	100 Max.

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

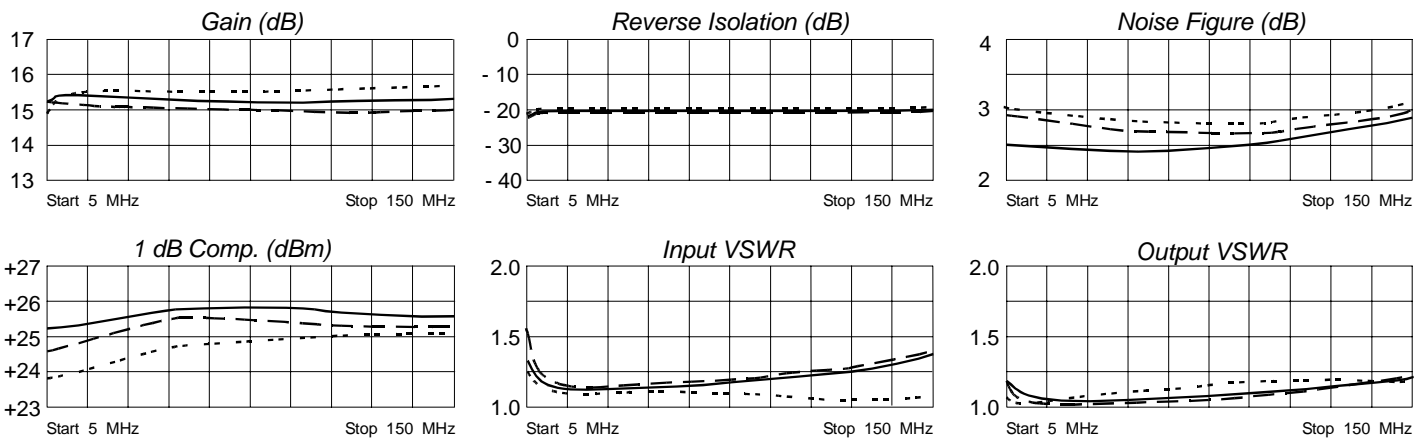
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +50 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +44 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +36 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 ..... + 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



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