

# RF AMPLIFIER

## MODEL *TM5198*

Available as: TM5198, 4 Pin TO-8 (T4)  
 TN5198, 4 Pin Surface Mount (SM3)  
 FP5198, 4 Pin Flatpack (FP4)  
 BX5198, Connectorized Housing (H1)

### Features

- Low Noise Figure: 3.0 dB Typical
- Excellent Reverse Isolation
- 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 - 450 MHz	5 - 450 MHz
Gain (dB)	28.0	27 Min.
Power @ 1 dB Comp. (dBm)	+13	+12 Min.
Reverse Isolation (dB)	-36	-35 Max.
VSWR In	1.3:1	1.5:1 Max.
Out	1.3:1	1.5:1 Max.
Noise figure (dB)	3.0	3.9 Max.
Power Vdc	+5	+5
mA	47	50 Max.

### 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 ..... +25 dBm (Typ.)  
 (Intermod values measured at midband)

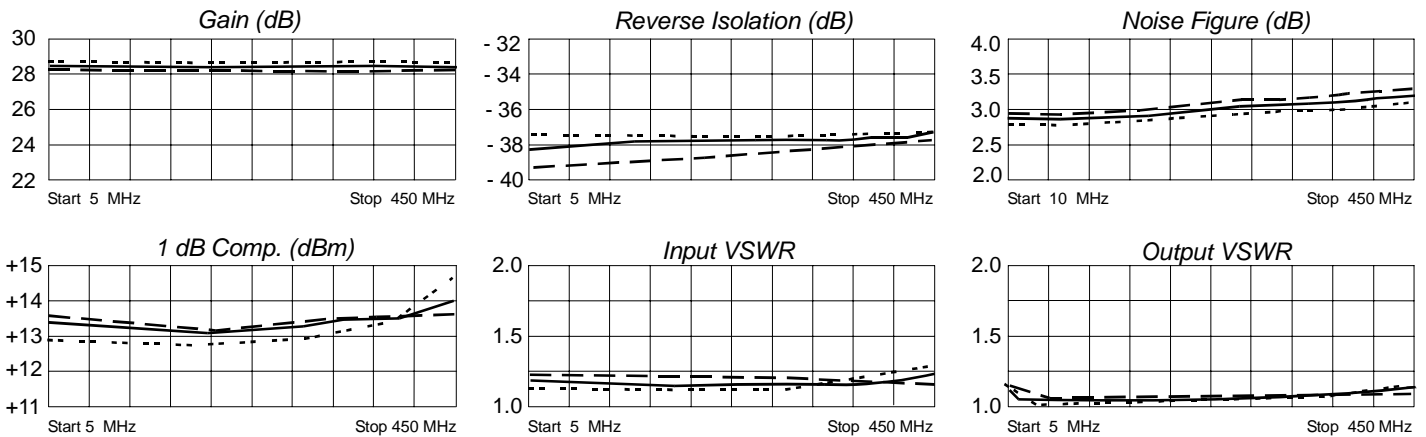
### Maximum (NO DAMAGE) Ratings

Ambient Operating Temperature ..... -55°C to + 125 °C  
 Storage Temperature ..... -65°C to + 150 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 8 Volts  
 Continuous RF Input Power ..... + 13 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.  
 Guaranteed when tested in a 50 ohm circuit.

Revision: April 21, 2026  
 ECN: Updated Intermod Typical Values

### Typical Performance Data



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