

RF AMPLIFIER

MODEL *TM5154*

Available as: TM5154, 4 Pin TO-8
 TN5154, 4 Pin Surface Mount (SM3)
 BX5154, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.6 Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +34 dBm (Typ.)
 Second Order Two Tone Intercept Point +31 dBm (Typ.)
 Third Order Two Tone Intercept Point +21 dBm (Typ.)

Specifications

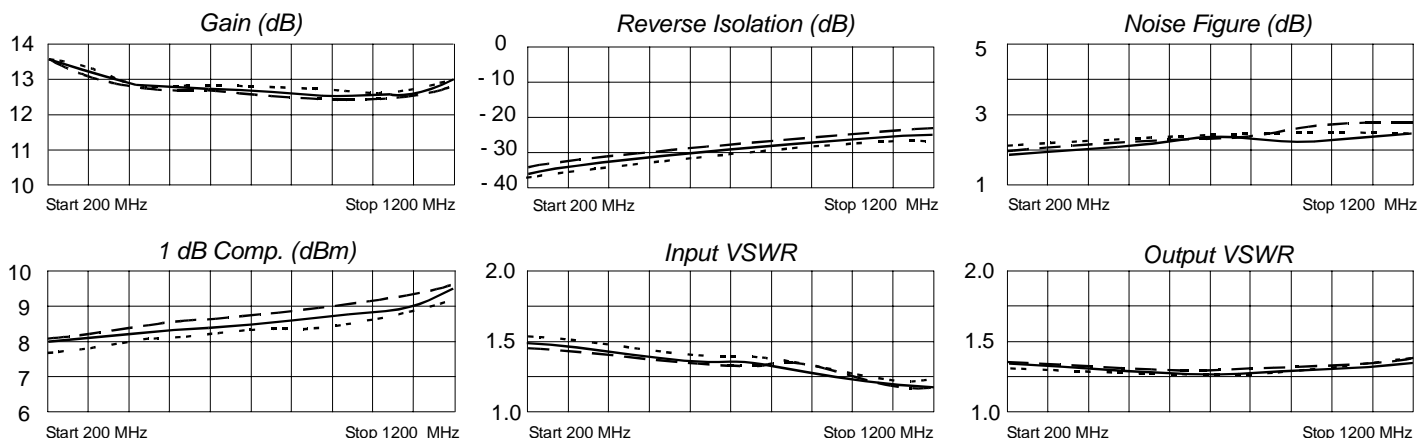
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	200 - 1200 MHz	200 - 1200 MHz
Gain (dB)	12.8	12 Min.
Power @ 1 dB Comp. (dBm)	+8	+7 Min.
Reverse Isolation (dB)	-23	-22 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	1.5:1 Max.
Noise Figure (dB)	2.6	2.8 Max.
Power Vdc	+15	+15 Min.
mA	23	24 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -62°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 8 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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

Typical Performance Data



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

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
200	-13.8	-163.1	13.3	154.2	-37.3	74.3	-19.6	-45.0
300	-15.2	35.1	13.0	124.5	-34.1	51.2	-19.9	-52.3
400	-15.8	161.8	12.8	99.2	-31.8	31.9	-19.8	-60.3
500	-16.7	142.4	12.6	75.7	-30.1	13.0	-19.8	-69.5
800	-24.4	100.5	12.9	9.1	-26.6	-41.4	-18.3	-102.4
1000	-25.1	26.2	13.0	-38.1	-25.3	-78.2	-18.5	-136.3
1100	-22.6	74.5	13.3	-62.1	-24.7	-96.7	-19.4	-154.5
1200	-22.6	39.9	13.6	-88.1	-24.2	-116.0	-21.6	-28.4



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