

# RF AMPLIFIER

## MODEL *TM6134*

Available as: TM6134, 4 Pin TO-8 (T4)  
 TN6134, 4 Pin Surface Mount (SM3)  
 FP6134, 4 Pin Flatpack (FP4)  
 BX6134, Connectorized Housing (H1)

### Features

- High Output Power: +26 dBm Typ.
- High Dynamic Range:  $I_{p3} = +39$  dBm Typ.
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +58 (Typ.)  
 Second Order Two Tone Intercept Point ..... +54 (Typ.)  
 Third Order Two Tone Intercept Point ..... +39 (Typ.)

### Specifications

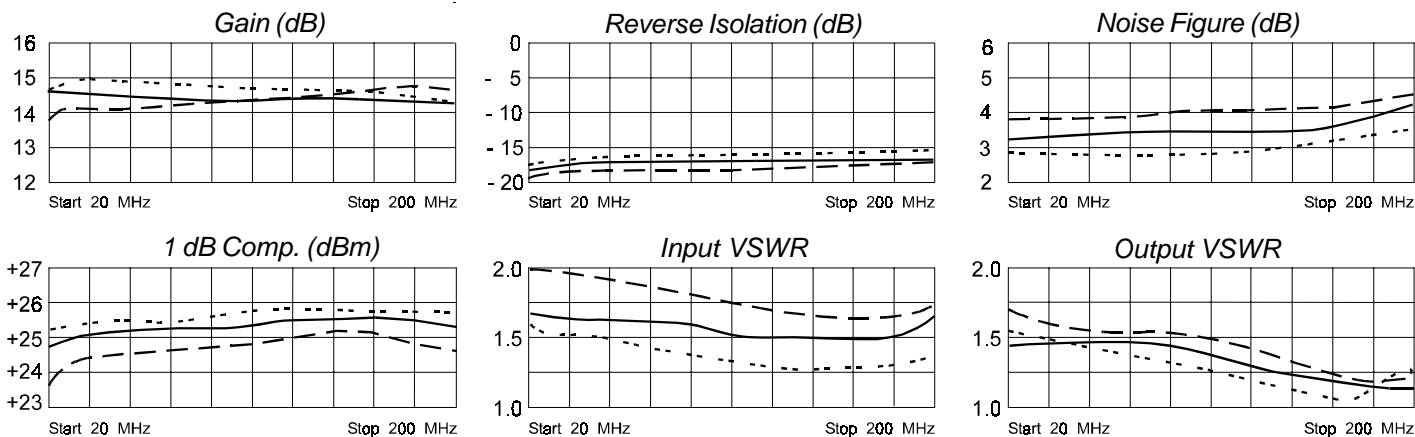
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 200 MHz	20 - 200 MHz
Gain (dB)	14.3	12.5 Min.
Power @ 1 dB Comp. (dBm)	+26	+23.0 Min.
Reverse Isolation (dB)	- 17	- 15 Max.
VSWR In	1.60:1	2.5:1 Max.
Out	1.35:1	2.5:1 Max.
Noise figure (dB)	4	6.0 Max.
Power Vdc	+15	+15
mA	90	110 Max.

### 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 ..... + 18 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
20	.25	-179	5.27	180	.13	179	.17	7
50	.24	175	5.23	165	.13	163	.17	-10
100	.23	173	5.19	146	.13	144	.13	-34
150	.26	178	5.17	127	.14	125	.07	-80
200	.33	178	5.11	108	.15	107	.08	162

# Amplifonix

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