

# RF AMPLIFIER

## MODEL *TM6554*

Available as: TM6554, 4 Pin TO-8 (T4)  
 TN6554, 4 Pin Surface Mount (SM3)  
 FP6554, 4 Pin Flatpack (FP4)  
 BX6554, Connectorized Housing (H1)

### Features

- High Gain: 27.5 dB Typical
- Medium Output Power: +8 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +38 (Typ.)  
 Second Order Two Tone Intercept Point ..... +32 (Typ.)  
 Third Order Two Tone Intercept Point ..... +19 (Typ.)

### Specifications

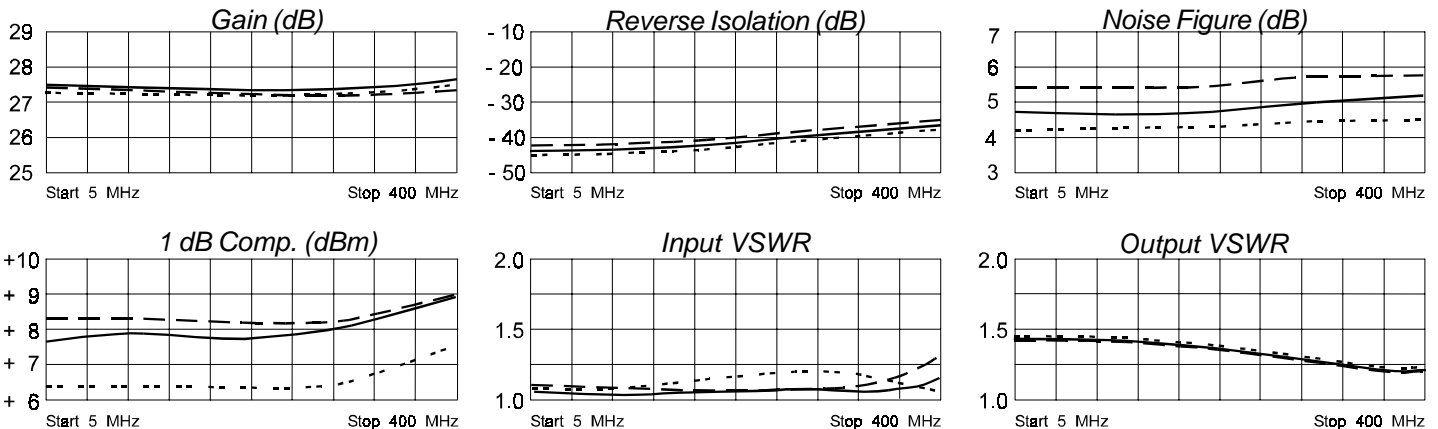
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	27.5	25.0 Min.
Power @ 1 dB Comp. (dBm)	+8	+6.0 Min.
Reverse Isolation (dB)	- 35	- 34 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	5	6.0 Max.
Power Vdc	+15	+15
mA	33	38 Max.

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

### 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

### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.02	-103	23.84	2	.01	5	.18	-8
50	.01	-156	23.68	-24	.01	10	.17	-19
100	.02	-176	23.47	-48	.01	14	.17	-37
200	.04	145	23.18	-96	.01	10	.15	-71
300	.02	108	23.37	-145	.13	12	.12	-110
400	.08	-96	24.69	164	.15	-10	.09	164



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