

RF AMPLIFIER

MODEL *TM6524*

Available as: TM6524, 4 Pin TO-8 (T4)
 TN6524, 4 Pin Surface Mount (SM3)
 FP6524, 4 Pin Flatpack (FP4)
 BX6524, Connectorized Housing (H1)

Features

- High Gain : 31 dB Typical
- Medium Output Power: +15 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +36 (Typ.)
 Second Order Two Tone Intercept Point +30 (Typ.)
 Third Order Two Tone Intercept Point +25 (Typ.)

Specifications

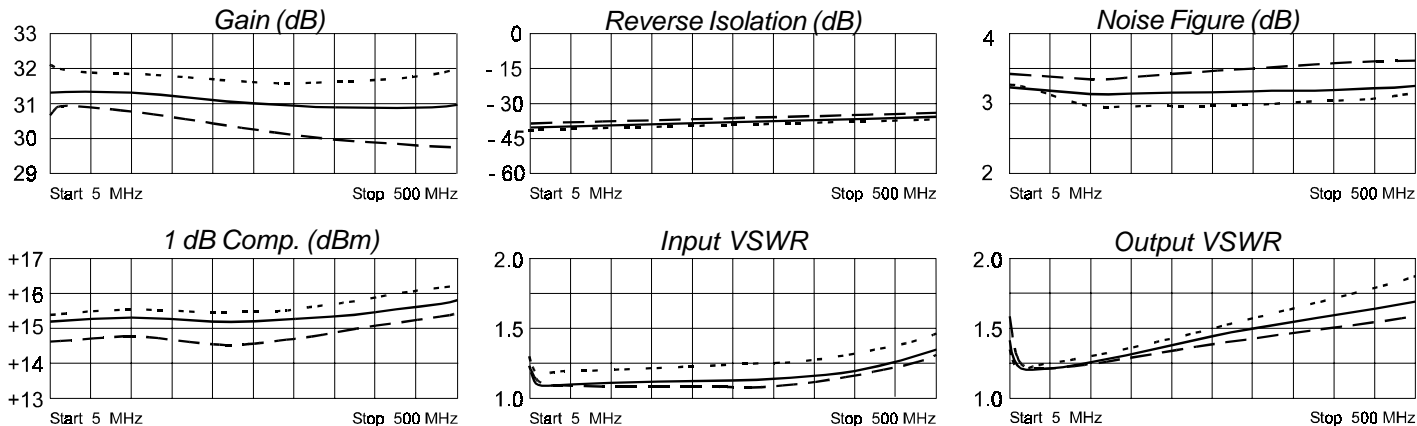
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	31	29.0 Min.
Power @ 1 dB Comp. (dBm)	+15	+14.0 Min.
Reverse Isolation (dB)	- 36	- 35 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3.5	4.0 Max.
Power Vdc	+15	+15
mA	70	75 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 + 13 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
5	.09	140	36.70	11	.01	16	.17	134
50	.03	172	36.52	-17	.01	4	.09	176
100	.04	-180	36.06	-36	.01	5	.10	180
200	.04	163	34.99	-71	.01	2	.15	166
300	.04	125	34.61	-105	.01	- 3	.21	142
400	.07	58	34.92	-141	.01	- 6	.26	111
500	.13	8	35.06	-171	.01	-20	.32	77
600	.22	- 28	34.94	143	.01	-30	.34	41



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