

RF AMPLIFIER

MODEL *TM7481*

Available as: TM7481, 4 Pin TO-8 (T4)
 TN7481, 4 Pin Surface Mount (SM3)
 FP7481, 4 Pin Flatpack (FP4)
 BX7481, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.3 dB Typical
- Medium Output Power: +16.2 dBm Typical
- 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	10 - 300 MHz	15 - 300 MHz
Gain (dB)	28.5	27.0 Min.
Power @ 1 dB Comp. (dBm)	+16.2	+14.5 Min.
Reverse Isolation (dB)	-32	-30 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.8:1	2.0:1 Max.
Noise Figure (dB)	2.3	3.0 Max.
Power Vdc	+15	+15
mA	27	32 Max.

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

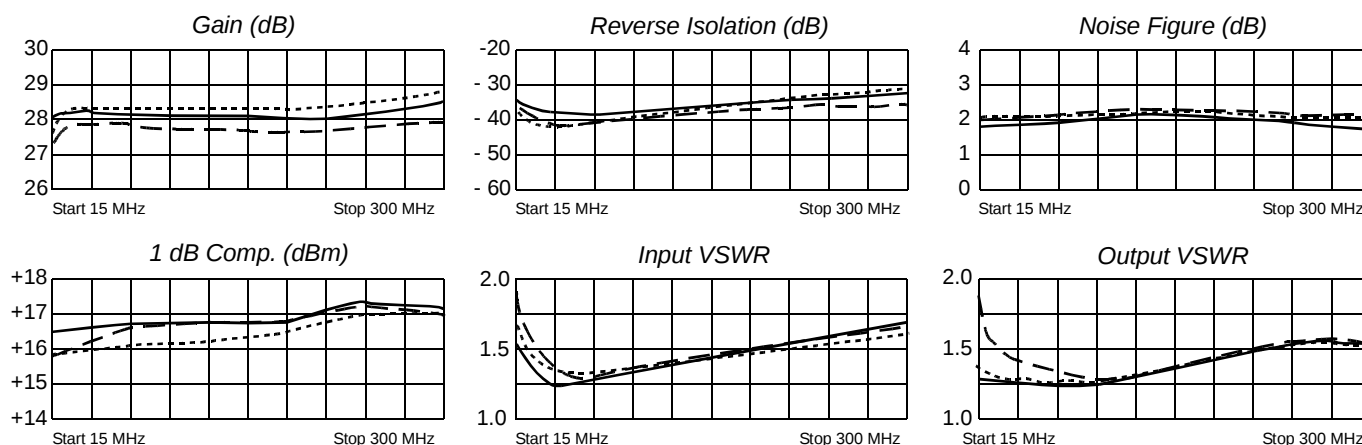
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +39 dBm (Typ.)
 Second Order Two Tone Intercept Point +33 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 19 Volts
 Continuous RF Input Power + 10 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.
15	.25	- 80	25.44	- 163	.0220	- 2	.04	- 93
50	.02	95	26.48	158	.0213	- 3	.03	- 159
100	.12	57	26.03	129	.0223	- 7	.04	- 115
150	.19	35	25.57	103	.0231	- 11	.09	- 121
200	.25	13	25.36	77	.0233	- 21	.15	- 139
250	.29	- 11	25.61	50	.0232	- 30	.19	- 160
300	.33	- 41	26.53	21	.0231	- 37	.21	- 177



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