

RF AMPLIFIER

MODEL *TM7207*

Available as: TM7207, 4 Pin TO-8 (T4)
 TN7207, 4 Pin Surface Mount (SM3)
 FP7207, 4 Pin Flatpack (FP4)
 BX7207, Connectorized Housing (H1)

Features

- Output Power: +16 dBm Typical
- Low Noise Figure: 2 dB 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	10 - 200 MHz
Gain (dB)		18	17 Min.
Power @ 1 dB Comp. (dBm)		+16	+15 Min.
Reverse Isolation (dB)		-22	-21 Max.
VSWR	In	<1.7:1	2.0:1 Max.
	Out	<1.7:1	2.0:1 Max.
Noise Figure (dB)		2.0	3.0 Max.
Power	Vdc	+15	+15
	mA	33	40 Max.

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

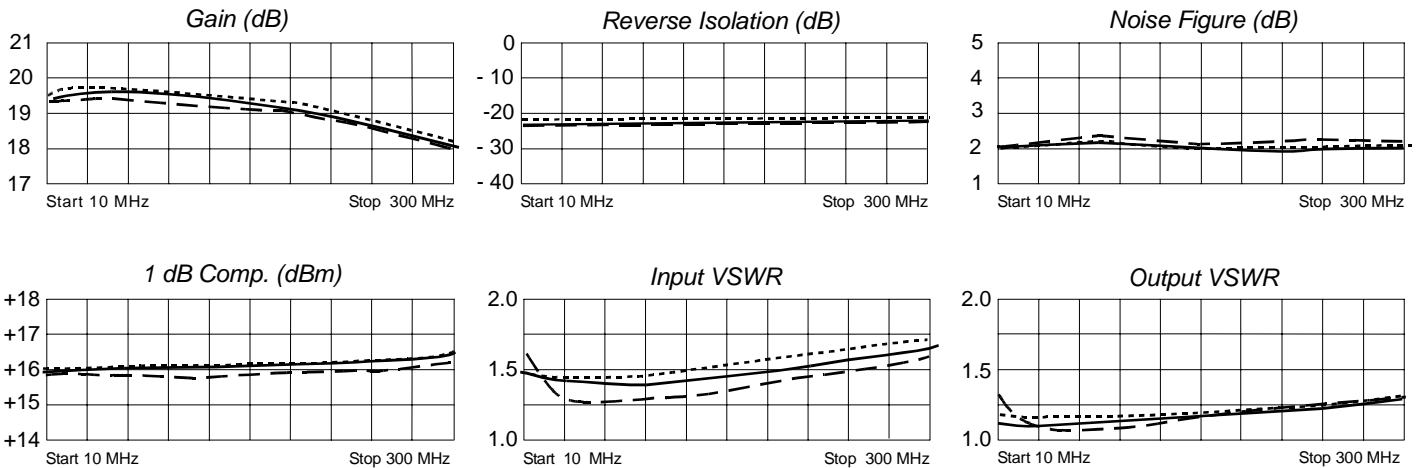
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +31 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 + 18 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 100 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
10	.21	-39	9.42	-172	.069	-171	.15	-56
50	.15	-29	9.53	167	.069	165	.05	-8
100	.16	-41	9.35	150	.073	148	.06	23
150	.17	-59	9.16	134	.077	132	.08	37
200	.19	-77	8.88	118	.081	119	.10	41
250	.21	-98	8.51	102	.085	104	.12	43
300	.22	-120	8.01	87	.090	92	.14	40



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