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 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
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 Out	<1.7:1 <1.7:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	2.0	3.0 Max.
Power Vdc mA	+15 33	+15 40 Max.

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

Typical Intermodulation Performance at 25 º C

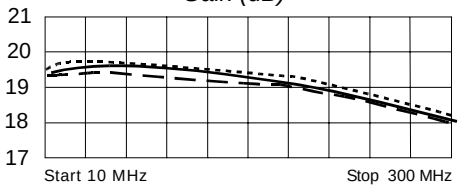
Second Order Harmonic Intercept Point ..... +48 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +42 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +31 dBm (Typ.)

Maximum Ratings

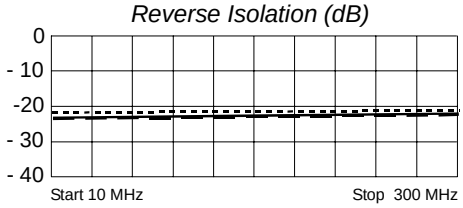
Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 18 Volts
Continuous RF Input Power ..... + 13 dBm
Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

Typical Performance Data

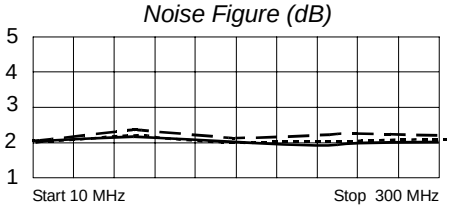
Gain (dB)



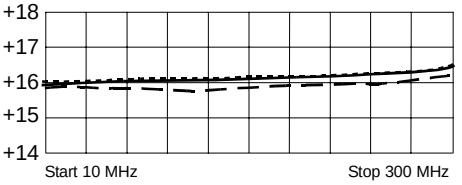
Reverse Isolation (dB)



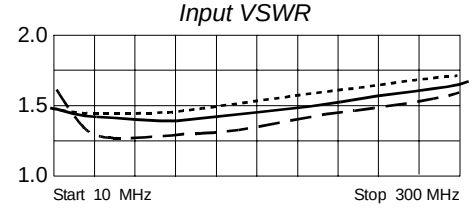
Noise Figure (dB)



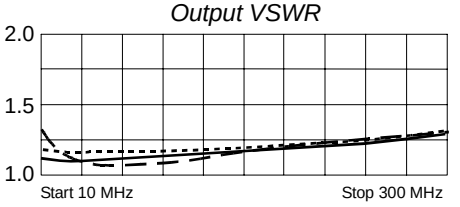
1 dB Comp. (dBm)



Input VSWR



Output VSWR



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

Freq	----S11----		----S21----		----S12----		----S22----	
MHz	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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