

RF AMPLIFIER

MODEL **TM7203**

Available as: TM7203, 4 Pin TO-8 (T4)
 TN7203, 4 Pin Surface Mount (SM3)
 FP7203, 4 Pin Flatpack (FP4)
 BX7203, Connectorized Housing (H1)

Features

- Low Noise Figure: 3.5 dB Typical
- High Gain: +32 dB 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 +18 (Typ.)

Specifications

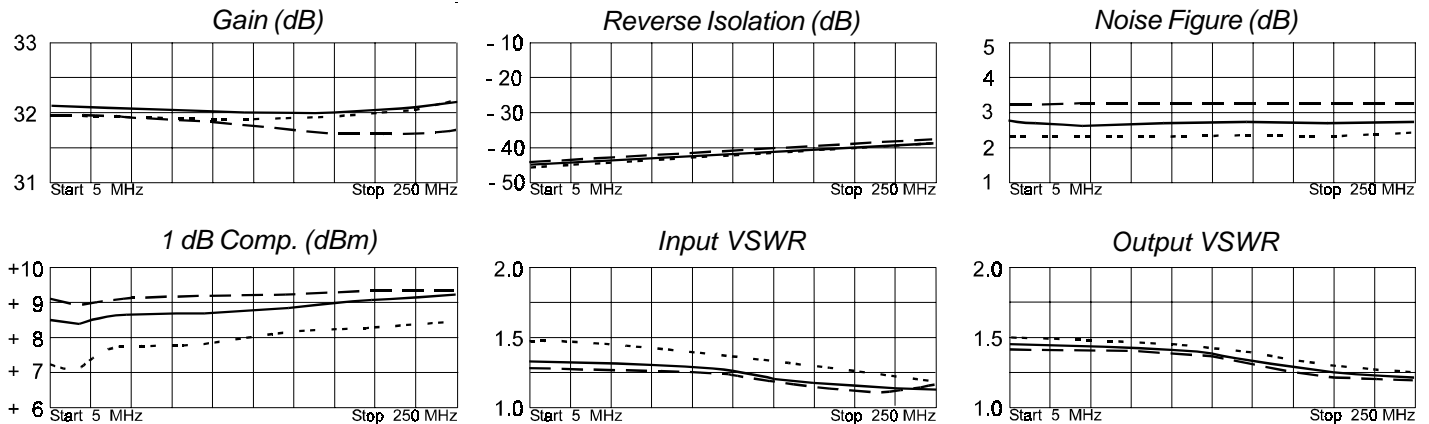
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 250 MHz	5 - 250 MHz
Gain (dB)	32	30.0 Min.
Power @ 1 dB Comp. (dBm)	+ 8	+ 6.5 Min.
Reverse Isolation (dB)	- 40	- 37 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	3	4.0 Max.
Power Vdc	+15	+15 Max.
mA	35	38 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	.14	-169	40.30	2	.01	-0	.19	-7
10	.14	-175	40.29	-2	.01	3	.19	-5
20	.13	-178	40.24	-8	.01	1	.19	-7
50	.13	-179	40.09	-24	.01	10	.18	-14
100	.12	177	39.69	-47	.01	17	.16	-27
150	.10	177	39.77	-70	.01	23	.14	-44
200	.07	-176	39.96	-94	.01	23	.11	-69
250	.04	-113	40.67	-118	.01	27	.09	-119
300	.14	-75	41.64	-145	.01	20	.16	-169



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