RF Amplifier
Low Noise: 1.4 dB

Model TM7111
10 to 100 MHz

Features
- Low Noise Figure: 1.4 dB Typical
- Medium Output Power: +17 dBm 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	10-100 MHZ	10-100 MHz
Gain (dB)	12.5	11.0 Min.
Power @ 1 dB Comp. (dBm)	+17	+15.5 Min.
Reverse Isolation (dB)	-15	-14 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	1.4	2.0 Max.
Power Vdc	+15	+15 Min.
Power mA	14	15 Max.

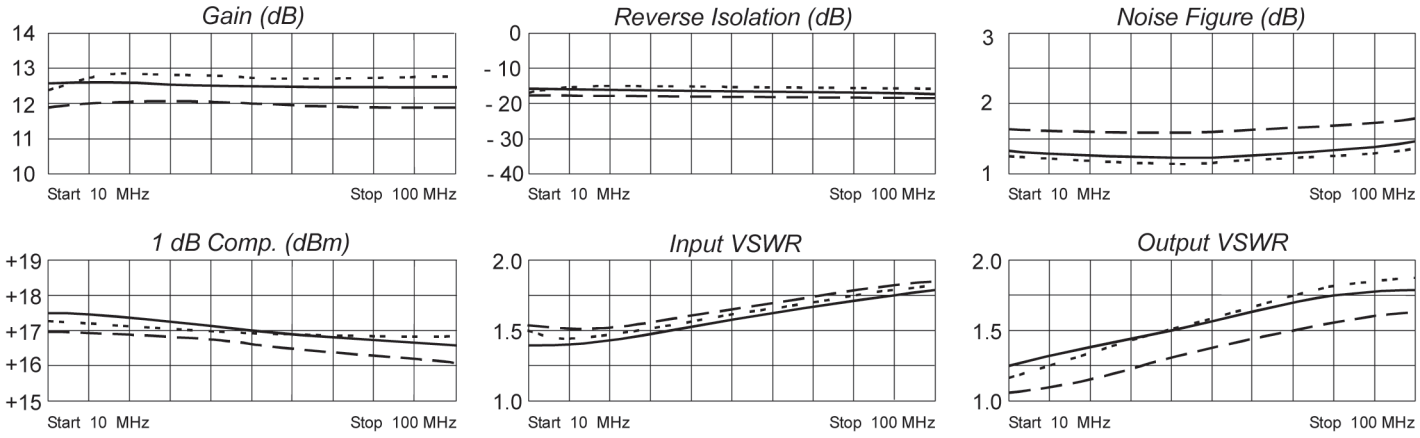
Note: Care should always be taken to effectively ground the case of each unit.

Typical Intermodulation Performance at 25 º C
Second Order Harmonic Intercept Point..... +53 dBm (Typ.)
Second Order Two Tone Intercept Point..... +47 dBm (Typ.)
Third Order Two Tone Intercept Point..... +33 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 ..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

Packaging Options (see Appendix)
TM7111, 4 Pin TO-8 (T4)
TN7111, 4 Pin Surface Mount (SM3)
FP7111, 4 Pin Flatpack (FP4)
BX7111,Connectorized Housing (H1)

Typical Performance Data



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

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
5	.16	177	4.24	5	.17	5	.10	23
10	.15	178	4.32	- 3	.17	- 3	.11	- 6
25	.16	-178	4.32	- 18	.17	- 17	.15	- 46
50	.21	175	4.26	- 38	.16	- 36	.21	- 80
75	.25	160	4.21	- 58	.16	- 56	.27	-102
100	.28	141	4.17	- 77	.15	- 74	.29	-119
150	.19	109	4.25	-123	.14	-119	.17	-128

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