RF Amplifier
High Output Power: +21 dBm

Model TM7282
20 to 250 MHz

Features
- High Output Power: +21 dBm Typical
- High Gain: 23.5 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	20-250 MHz	20-250 MHz
Gain (dB)	23.5	21.0 Min.
Power @ 1 dB Comp. (dBm)	+21	+18.0 Min.
Reverse Isolation (dB)	-28	-27 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.3:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15 Min.
Power mA	45	50 Max.

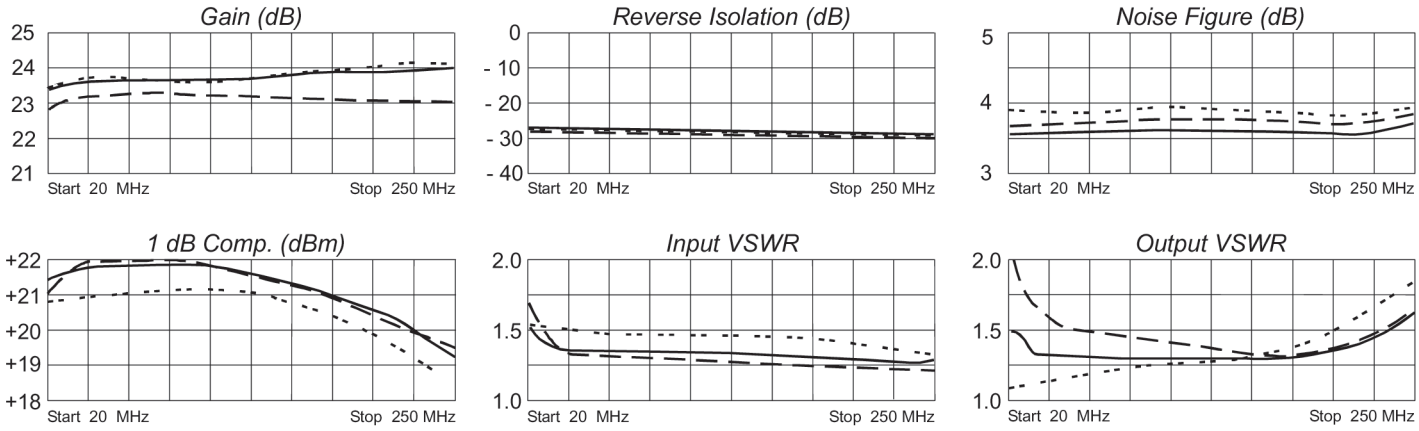
Note: Care should always be taken to effectively ground the case of each unit.

Typical Intermodulation Performance at 25 º C
Second Order Harmonic Intercept Point..... +43 dBm (Typ.)
Second Order Two Tone Intercept Point..... +38 dBm (Typ.)
Third Order Two Tone Intercept Point..... +34 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)
TM7282, 4 Pin TO-8 (T4)
TN7282, 4 Pin Surface Mount (SM3)
FP7282, 4 Pin Flatpack (FP4)
BX7282,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
10	.34	- 94	14.03	-148	.03	19	.34	112
20	.22	-128	14.93	-171	.03	6	.19	99
50	.16	-168	15.15	164	.03	- 5	.13	76
100	.15	157	15.21	136	.03	- 13	.13	38
150	.13	127	15.31	111	.03	- 23	.13	- 9
200	.12	91	15.46	84	.03	- 38	.15	- 69
250	.10	40	15.34	56	.03	- 51	.24	-129
300	.12	- 34	14.77	25	.02	- 69	.41	-173

SPECTRUM MICROWAVE • 2144 Franklin Drive N.E. • Palm Bay, Florida 32905 • Phone: (888) 553-7531 • Fax: (888) 553-7532
www.specwave.com SPECTRUM CONTROL GmbH • Hansastrasse 6 • 91126 Schwabach, Germany • Phone: (49)-9122-795-0 • Fax: (49)-9122-795-58