RF AMPLIFIER
MODEL *TM9030*

Available as: TM9030, 4 Pin TO-8
TN9030, 4 Pin Surface Mount (SM3)
BX9030, Connectorized Housing (H1)

Features

- High Output Power: +25 dBm Typical
- Moderate Gain: 14 dB Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point .....+55 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +50 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +32 dBm (Typ.)

Specifications

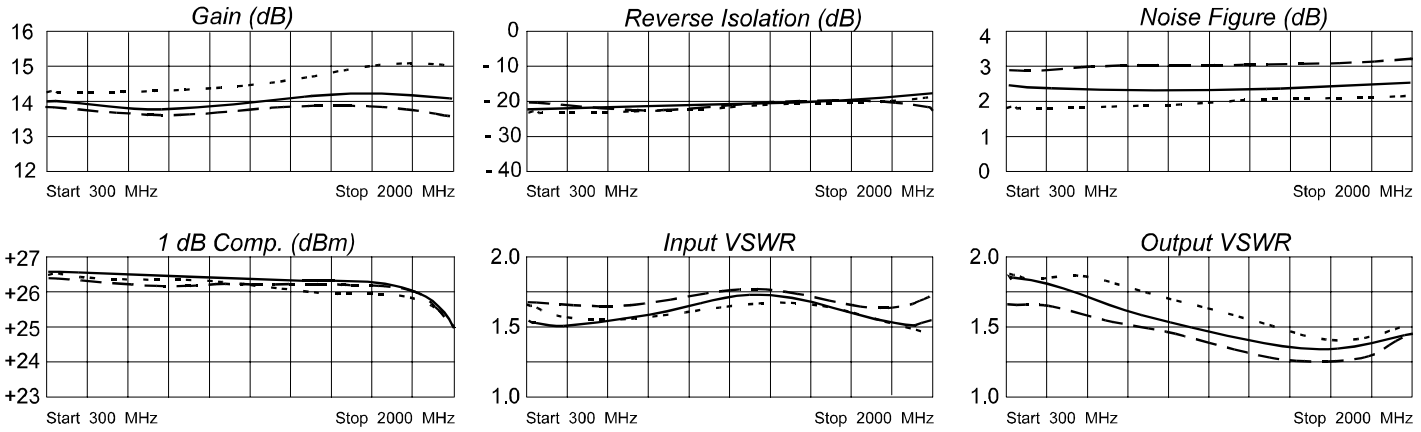
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	300 - 2000 MHz	500 - 2000 MHz
Gain (dB)	14	13 Min.
Power @ 1 dB Comp. (dBm)	+25	+23 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+12	+12
mA	150	160 Max.

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

Absolute Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 15 Volts
Continuous RF Input Power ..... + 20 dBm
Short Term RF Input Power.... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.200 Watt (3 µsec Max.)

Typical Performance Data



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

Linear S-Parameters

FREQ.	S11		S21		S12		S22	
MHz	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
300	.22	-112	5.04	163	.09	-8	.30	146
490	.22	-129	4.99	140	.09	-15	.29	130
680	.24	-144	4.96	121	.09	-22	.27	113
870	.26	-159	4.90	101	.09	-29	.26	95
1060	.28	-174	4.94	82	.09	-38	.23	77
1200	.30	171	4.98	63	.09	-47	.21	57
1440	.30	153	5.02	42	.10	-58	.18	38
1630	.29	132	5.17	20	.10	-68	.16	18
1820	.26	102	5.32	-6	.11	-82	.14	0
2010	.23	50	5.36	-37	.11	-103	.15	-18
2200	.35	-29	4.73	-78	.11	-133	.17	-61

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