

RF AMPLIFIER

MODEL *TM3055*

Available as: TM3055, 4 Pin TO-8 (T4)
 TN3055, 4 Pin Surface Mount (SM3)
 BX3055, Connectorized Housing (H1)

Features

- Medium Gain: 12 dB Typical
- Output Power: 18.5 dBm Typical
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	300 - 1000 MHz	300 - 1000 MHz
Gain (dB)	12	11 Min.
Power @ 1 dB Comp. (dBm)	+18.5	+18 Min.
Reverse Isolation (dB)	-12	-10 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<2.25:1	3.0:1 Max.
Noise Figure (dB)	4.3	5.5 Max.
Power Vdc	+15	+15
mA	50	60 Max.

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

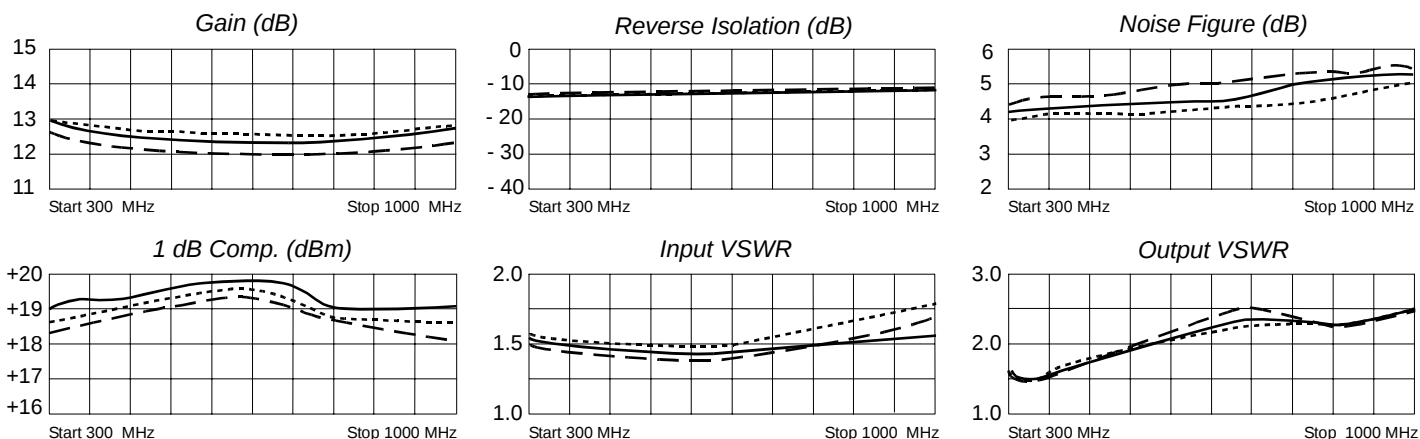
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +47 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 dBm (Typ.)

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 + 18 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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
300	.25	45	3.89	122	.1760	123	.40	5
400	.25	9	3.92	103	.1787	105	.43	-5
500	.24	-27	3.94	83	.1821	88	.44	-18
600	.22	-70	4.05	62	.1930	70	.44	-32
700	.19	-120	4.15	39	.2026	52	.40	-48
800	.16	-180	4.21	15	.2187	32	.33	-70
900	.16	105	4.13	-12	.2250	10	.23	-100
1000	.24	35	3.92	-40	.2353	-15	.17	-168



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