RF AMPLIFIER
MODEL *TM3057*

Available as: TM3057, 4 Pin TO-8 (T4)
TN3057, 4 Pin Surface Mount (SM3)
BX3057, Connectorized Housing (H1)

Features

- Output Power: +19.5 dBm Typical
- Medium Gain: 17.5 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	5 - 500 MHz	10 - 500 MHz
Gain (dB)	17.5	16.5 Min.
Power @ 1 dB Comp. (dBm)	+19.5	+18.0 Min.
Reverse Isolation (dB)	-20	-17 Max.
VSWR In Out	<1.8:1 <1.8:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	2.5	4.0 Max.
Power Vdc mA	+15 49	+15 55 Max.

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

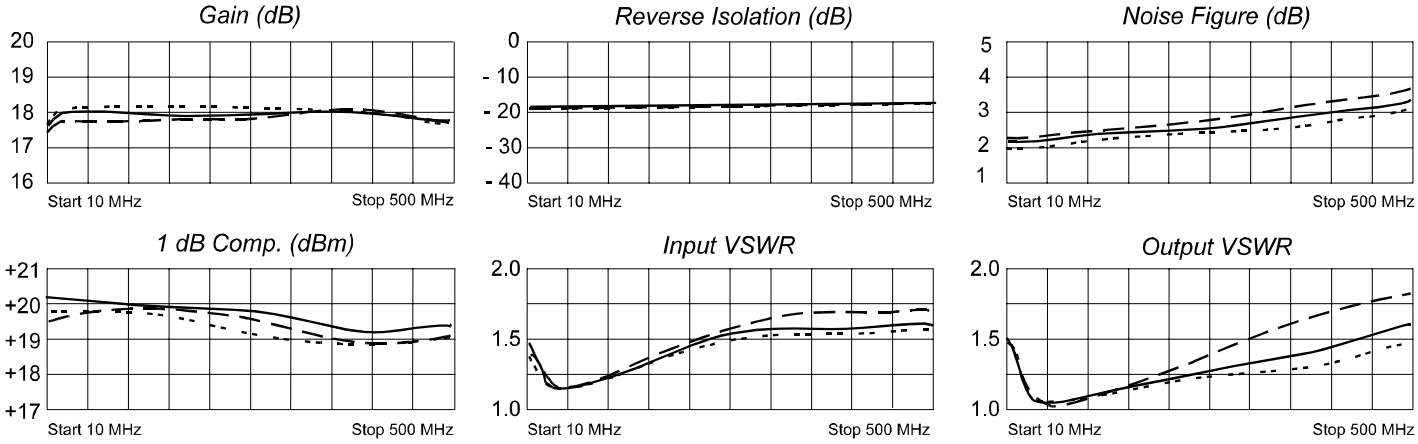
Typical Intermodulation Performance at 25 ºC

Second Order Harmonic Intercept Point ..... +50 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +44 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +35 dBm (Typ.)

Absolute Maximum (No Damage) 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.)

Typical Performance Data



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

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- Mag	Deg
5	0.26	- 49	7.41	-158	0.09	-158	0.25	- 54
55	0.12	- 61	7.80	160	0.09	159	0.05	- 37
104	0.14	- 92	7.76	139	0.09	137	0.06	- 32
154	0.16	-122	7.75	118	0.09	116	0.07	- 40
203	0.18	-149	7.75	98	0.09	96	0.08	- 50
253	0.21	-175	7.76	78	0.10	76	0.10	- 62
302	0.22	159	7.78	57	0.10	56	0.12	- 75
352	0.23	134	7.80	36	0.10	37	0.15	- 89
401	0.23	107	7.83	14	0.10	17	0.18	-104
451	0.23	79	7.82	- 8	0.10	- 2	0.21	-119
500	0.22	48	7.75	- 31	0.11	- 22	0.25	-136

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Rev. 7/15/10