RF AMPLIFIER
MODEL *TM3018*

Available as: TM3018, 4 Pin TO-8 (T4)
TN3018, 4 Pin Surface Mount (SM3)
FP3018, 4 Pin Flatpack (FP4)
BX3018, Connectorized Housing (H1)

Features

- Medium Gain: 12.5 dB Typical
- High Output Power: +21.5 dBm Typical
- Operating Temp. 0 ºC to +71 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 ºC

Second Order Harmonic Intercept Point.....+62 dBm (Typ.)
Second Order Two Tone Intercept Point.....+59 dBm (Typ.)
Third Order Two Tone Intercept Point.....+33 dBm (Typ.)

Specifications

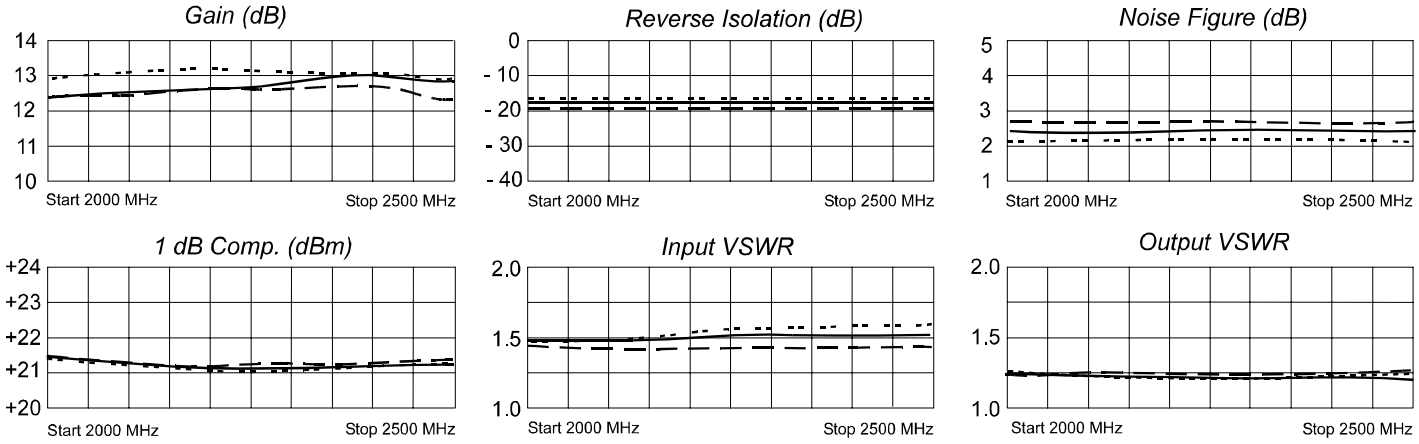
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +71 ºC
Frequency	2000 - 2500 MHz	2000 - 2500 MHz
Gain (dB)	12.5	11 Min.
Power @ 1 dB Comp. (dBm)	+21.5	+20 Min.
Reverse Isolation (dB)	-20	-18 Max.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	2.5	3.5 Max.
Power Vdc	+15	+15
Power mA	105	110 Max.

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

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.)

Typical Performance Data



Legend ——— *+25 ºC* – – – *+71 ºC* - - - - - - *0ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	---S21---- Mag	Deg	----S12---- Mag	Deg	---S22---- Mag	Deg
2000	0.19	85	4.27	-102	0.10	162	0.12	148
2050	0.19	77	4.29	-110	0.10	158	0.12	134
2100	0.20	69	4.34	-118	0.11	151	0.11	122
2150	0.20	61	4.38	-126	0.10	144	0.11	110
2200	0.20	55	4.37	-134	0.10	138	0.11	100
2250	0.20	47	4.38	-142	0.10	134	0.10	86
2300	0.20	41	4.41	-150	0.10	129	0.10	73
2350	0.20	33	4.50	-159	0.10	122	0.10	61
2400	0.20	25	4.54	-168	0.10	116	0.10	48
2450	0.20	17	4.46	-178	0.10	110	0.11	33
2500	0.20	8	4.40	174	0.10	106	0.11	17

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Rev. 9/18/08