

RF AMPLIFIER

MODEL *TM3068*

Available as: TM3068, 4 Pin TO-8 (T4)
 TN3068, 4 Pin Surface Mount (SM3)
 BX3068, Connectorized Housing (H1)

Features

- Output Power: +12.5 dBm Typical
- High Gain: +21 dB 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	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	21	20 Min.
Power @ 1 dB Comp. (dBm)	+12.5	+10 Min.
Reverse Isolation (dB)	-30	-29 Max.
VSWR In	<1.65:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15
mA	55	60 Max.

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

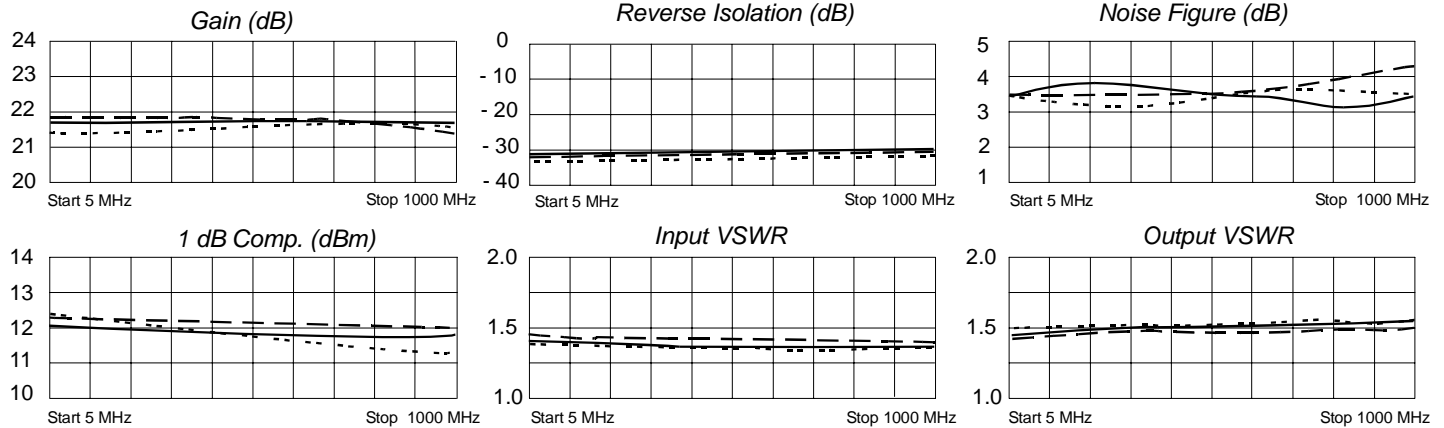
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +50 dBm (Typ.)
 Second Order Two Tone Intercept Point.... +44 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +24 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 8 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
5	.10	3	12.22	8	.0227	11	.19	174
30	.10	-15	12.15	-5	.0254	4	.18	178
55	.09	-26	12.14	-11	.0285	2	.18	176
80	.10	-34	12.12	-16	.0242	5	.18	175
100	.10	-38	12.12	-21	.0241	1	.18	175
200	.11	-77	12.21	-42	.0258	3	.19	170
300	.13	-106	12.26	-64	.0256	9	.20	163
400	.15	-142	12.24	-86	.0239	6	.22	150
500	.16	-151	11.99	-107	.0285	-9	.18	142
600	.19	-177	12.08	-129	.0235	6	.20	134
700	.20	159	11.95	-151	.0270	5	.21	120
800	.18	137	11.88	-174	.0248	-4	.18	106
900	.14	118	11.76	164	.0273	-13	.17	91
1000	.11	112	12.02	142	.0306	-15	.11	88



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