

RF AMPLIFIER

MODEL *TM3056*

Available as: TM3056, 4 Pin TO-8 (T4)
 TN3056, 4 Pin Surface Mount (SM3)
 BX3056, Connectorized Housing (H1)

Features

- Low Noise Figure: 0.9 dB Typical
- Medium Gain: +19 dB Typical
- Operating Temp. -40 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +42 dBm (Typ.)
 Second Order Two Tone Intercept Point +37 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 dBm (Typ.)

Specifications

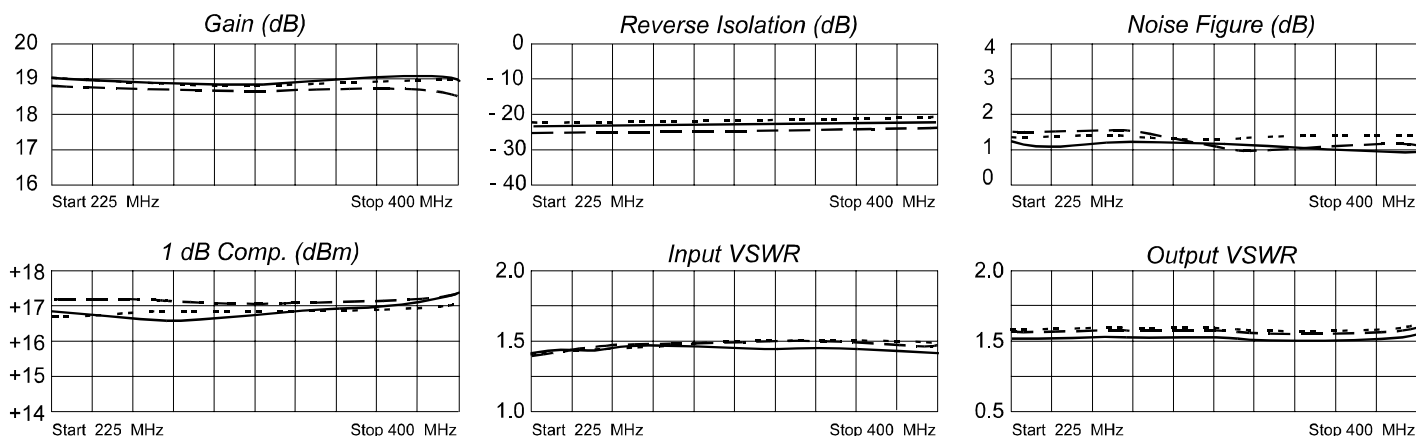
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +85 °C
Frequency	225 - 400 MHz	225 - 400 MHz
Gain (dB)	19	18.0 Min.
Power @ 1 dB Comp. (dBm)	+17	+15 Min.
Reverse Isolation (dB)	-22	-20 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	0.9	1.5 Max.
Power Vdc	+15	+15
mA	46	48 Max.

Absolute Maximum (No Damage) 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 +13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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

Typical Performance Data



Legend ——— +25 °C - - - - +85 °C ······ -40 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
225	0.25	0	8.81	147	0.05	-10	0.17	175
243	0.24	-6	8.80	143	0.06	-12	0.17	171
260	0.24	-11	8.79	139	0.06	-14	0.17	167
278	0.23	-17	8.78	136	0.06	-15	0.17	164
295	0.23	-22	8.76	132	0.06	-17	0.17	161
313	0.22	-27	8.74	128	0.06	-19	0.17	158
330	0.22	-33	8.72	125	0.06	-21	0.17	155
348	0.22	-38	8.69	121	0.06	-23	0.17	153
365	0.21	-42	8.67	118	0.06	-25	0.17	150
383	0.21	-47	8.64	114	0.06	-27	0.17	147
400	0.21	-52	8.62	111	0.06	-28	0.17	145



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 Rev. 5/20/10

www.spectrummicrowave.com Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001