

RF AMPLIFIER

MODEL *TM3079*

Available as: TM3079, 4 Pin TO-8 (T4)
 TN3079, 4 Pin Surface Mount (SM3)
 BX3079, SMA Connectorized Housing (H1)

Features

- Low +5 Volt Supply
- Wide 50 - 2000 MHz Bandwidth
- High Reverse Isolation
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	50 - 2000 MHz	50 - 2000 MHz
Gain (dB)	19.5	18 Min.
Power @ 1 dB Comp.	+13	+12 Min.
Reverse Isolation (dB)	-35	-30 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.5 Max.
Power Vdc	+5	+5
mA	70	75 Max.

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

Typical Intermodulation Performance at 25 ° C

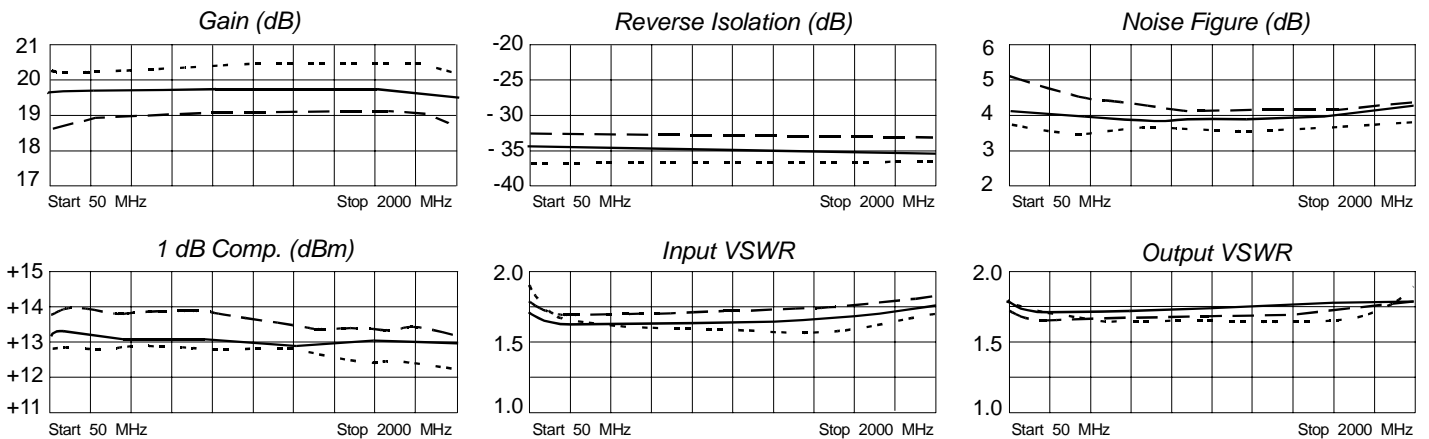
Second Order Harmonic Intercept Point +45 dBm (Typ.)
 Second Order Two Tone Intercept Point +40 dBm (Typ.)
 Third Order Two Tone Intercept Point +25 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 8 Volts
 Continuous RF Input Power + 10 dBm
 Short Term RF Input Power 20 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.2 Watt (3 µsec Max.)

Legend ——— + 25 °C - - - - + 85 °C - - - - - -55 °C

Typical Performance Data



Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
50	.22	-7	9.43	-3	.0141	1	.14	178
100	.22	-11	9.46	-12	.0142	-1	.14	176
200	.21	-20	9.49	-27	.0146	-4	.14	173
400	.20	-39	9.52	-55	.0144	-6	.14	167
800	.17	-77	9.63	-112	.0145	-18	.13	153
1200	.12	-116	9.46	-170	.0134	-38	.12	141
1600	.12	-169	9.56	131	.0134	-62	.10	140
2000	.29	118	9.17	63	.0101	-99	.15	169



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