

RF AMPLIFIER

MODEL *TM3087*

Available as: TM3087, 4 Pin TO-8 (T4)
 TN3087, 4 Pin Surface Mount (SM3)
 FP3087, 4 Pin Flatpack (FP4)
 BX3087, Connectorized Housing (H1)

Features

- High Output Power: +25 dBm Typical
- Medium Gain: 16 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Superior Phase Noise Performance

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 200 MHz	20 - 200 MHz
Gain (dB)	16.0	15.0 Min.
Power @ 1 dB Comp. (dBm)	+25	+24 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	3.0	6.0 Max.
Power Vdc	+12	+12 Min.
mA	85	90 Max.

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

Typical Intermodulation Performance at 25 °C

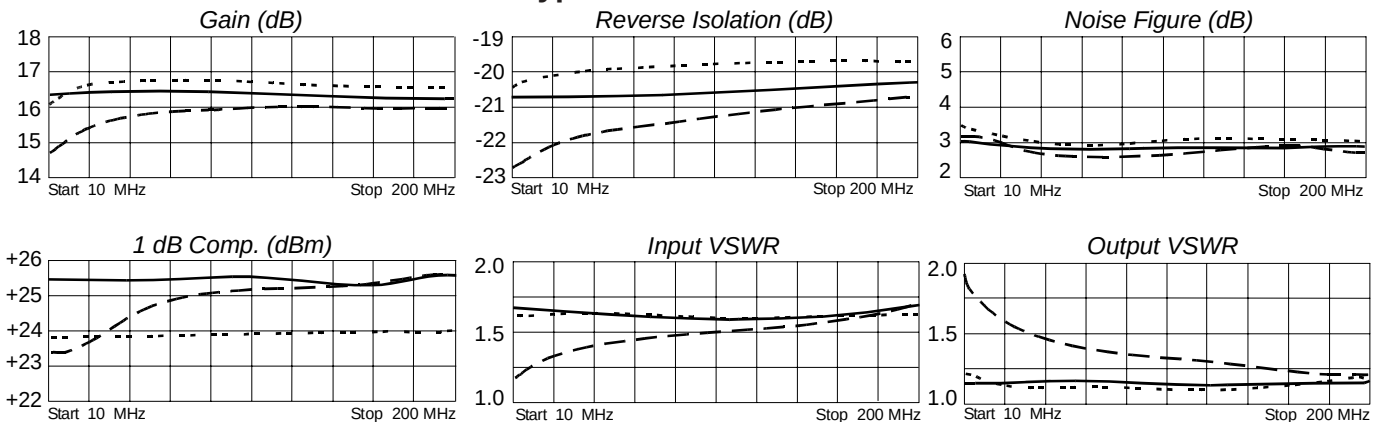
Second Order Harmonic Intercept Point +52 dBm (Typ.)
 Second Order Two Tone Intercept Point +47 dBm (Typ.)
 Third Order Two Tone Intercept Point +41 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 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.)

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
10	.25	-15	6.57	-170	.0919	-170	.08	-123
20	.25	-15	6.64	-180	.0922	-179	.07	-152
30	.24	-18	6.63	175	.0930	175	.07	-168
40	.24	-22	6.62	171	.0934	170	.07	-177
50	.24	-26	6.61	167	.0932	166	.07	177
60	.24	-31	6.60	164	.0940	164	.07	171
70	.23	-36	6.58	161	.0933	160	.07	166
80	.23	-40	6.58	158	.0936	157	.07	162
90	.23	-46	6.57	154	.0944	153	.07	159
100	.23	-51	6.57	151	.0938	150	.07	154
110	.23	-56	6.56	148	.0954	147	.07	152
120	.23	-62	6.54	145	.0951	144	.06	151
130	.23	-68	6.54	142	.0957	141	.06	152
140	.23	-74	6.53	139	.0958	137	.06	150
150	.24	-80	6.52	136	.0964	134	.06	152
160	.24	-86	6.50	132	.0965	131	.06	154
170	.24	-93	6.48	129	.0970	128	.06	155
180	.25	-99	6.46	126	.0968	125	.06	159
190	.25	-106	6.45	123	.0968	122	.06	162
200	.26	-112	6.42	120	.0982	119	.07	167



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