

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

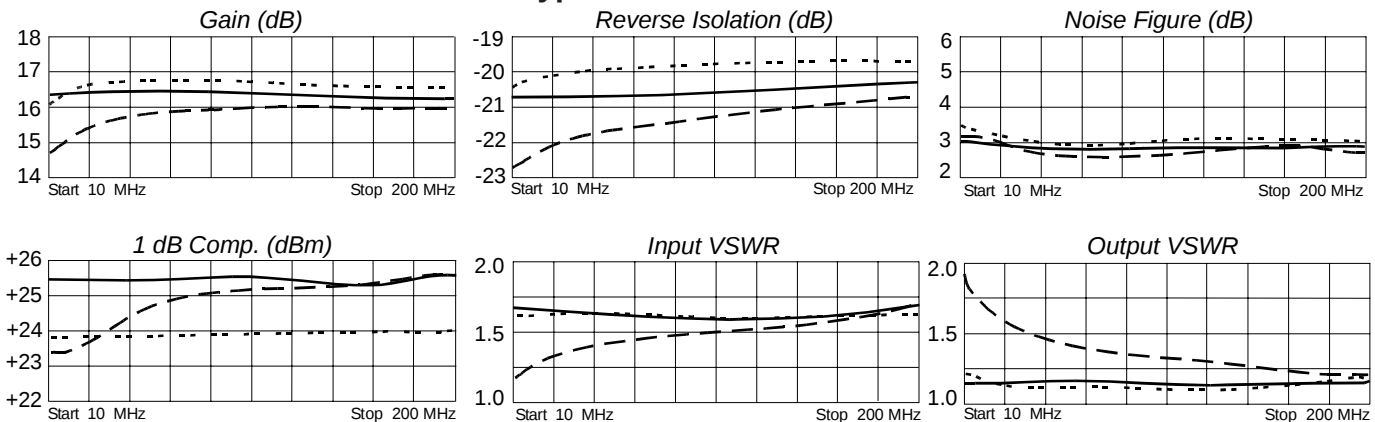
Second Order Harmonic Intercept Point +52 dBm (Typ.)
 Second Order Two Tone Intercept Point +47 dBm (Typ.)
 Third Order Two Tone Intercept Point +41 dBm (Typ.)

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--- Mag Deg	---S21--- Mag Deg	---S12--- Mag Deg	---S22--- 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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