

RF AMPLIFIER

MODEL TR3084

Available as: TR3084, 4 Pin TO-8B (T8)
 RN3084, 4 Pin Surface Mount (SM19)
 BR3084, Connectorized Housing (H2)

Features

- High Gain: 27dB Typical
- High Output Power: +29 dBm 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	10 - 300 MHz	10 - 300 MHz
Gain (dB)	27	25 Min.
Power @ 1 dB Comp. (dBm)	29	27 Min.
Reverse Isolation (dB)	-34	-30 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15 Min.
mA	280	300 Max.

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

Typical Intermodulation Performance at 25 ° C

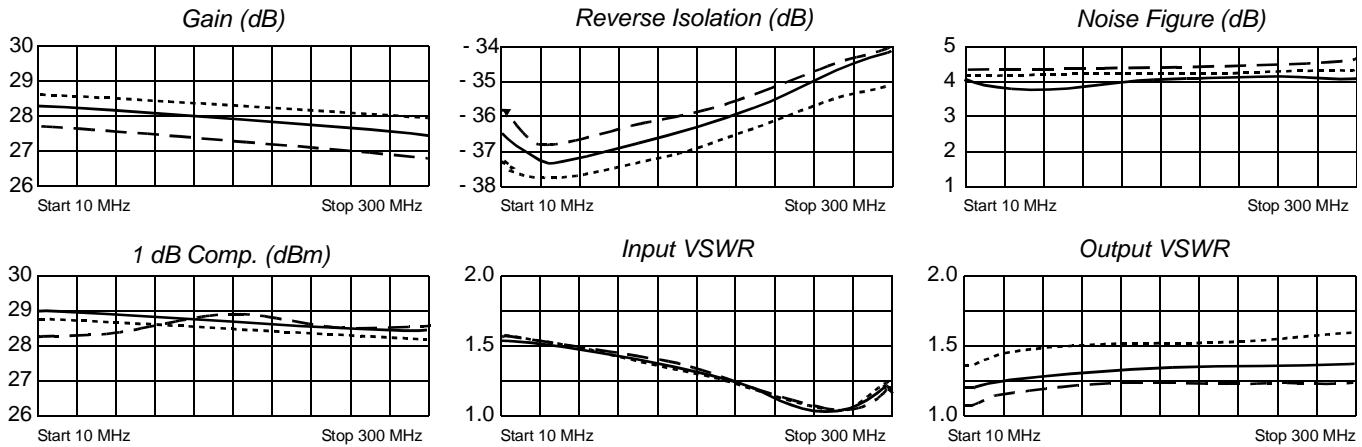
Second Order Harmonic Intercept Point.....+55 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+50 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+40 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 18 dBm
 Short Term RF Input Power 100 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
10	.21	-177	25.69	26	.0146	8	.09	-131
50	.16	165	25.30	-16	.0134	-1	.14	-172
100	.13	149	25.08	-40	.0144	-0	.15	179
150	.09	136	24.82	-62	.0155	-6	.16	171
200	.05	131	24.48	-85	.0165	-10	.17	163
250	.03	-145	24.03	-107	.0179	-12	.17	153
300	.09	-123	23.24	-130	.0184	-21	.17	146



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