

RF AMPLIFIER

MODEL *TM3046*

Available as: TM3046, 4 Pin TO-8 (T4)
 TN3046, 4 Pin Surface Mount (SM3)
 BX3046, Connectorized Housing (H1)

Features

- High Gain: 32 dB Typical
- Low Noise Figure: <3 dB Typical
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	32	28 Min.
Power @ 1 dB Comp. (dBm)	+3	-1 Min.
Reverse Isolation (dB)	-42	-40 Max.
VSWR In	1.25:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	<3	4.0 Max.
Power Vdc	+5	+5
mA	30	35 Max.

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

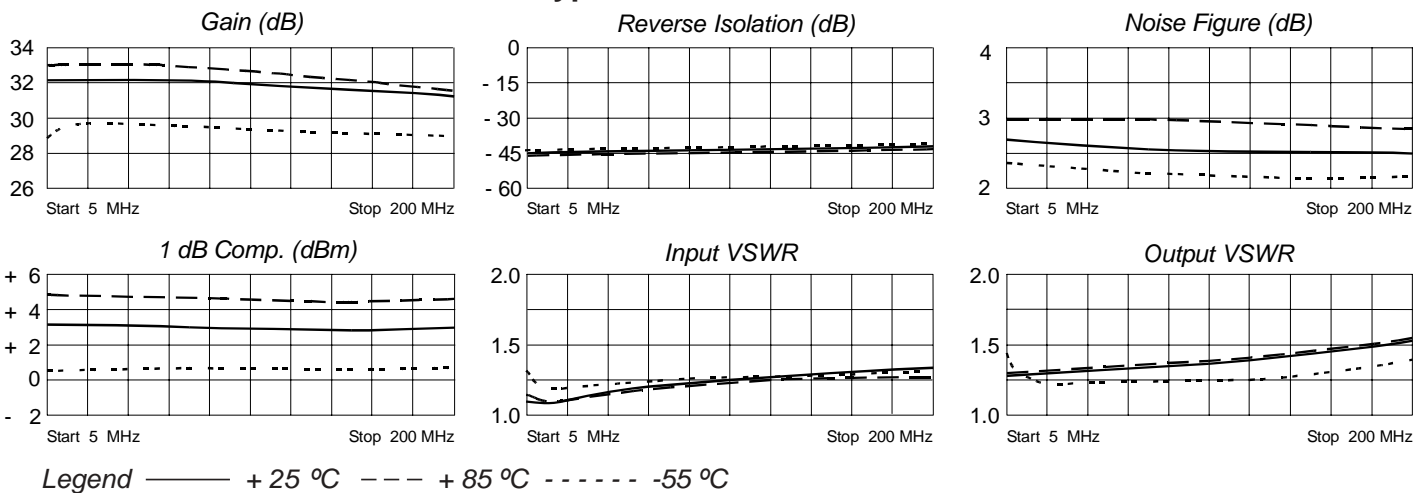
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +32 dBm (Typ.)
 Second Order Two Tone Intercept Point +26 dBm (Typ.)
 Third Order Two Tone Intercept Point +16 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 + 6 dBm
 Short Term RF Input Power 10 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.1 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.16	-166	48.64	4	.0062	-1	.12	-170
10	.16	-168	48.92	-1	.0056	-1	.12	-176
15	.15	-170	48.64	-4	.0061	4	.12	178
50	.16	-179	48.40	-17	.0056	13	.12	-177
100	.17	-175	48.33	-36	.0069	13	.15	177
150	.20	-178	48.07	-55	.0073	34	.18	172
200	.18	174	48.36	-74	.0082	30	.24	159

