

# RF AMPLIFIER

## MODEL *TM7347*

Available as: TM7347, 4 Pin TO-8 (T4)  
 TN7347, 4 Pin Surface Mount (SM3)  
 FP7347, 4 Pin Flatpack (FP4)  
 BX7347, Connectorized Housing (H1)

### Features

- Low Noise Figure: 2.1 dB Typical
- Output Power : +16 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+50 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+44 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+32 dBm (Typ.)

### Specifications

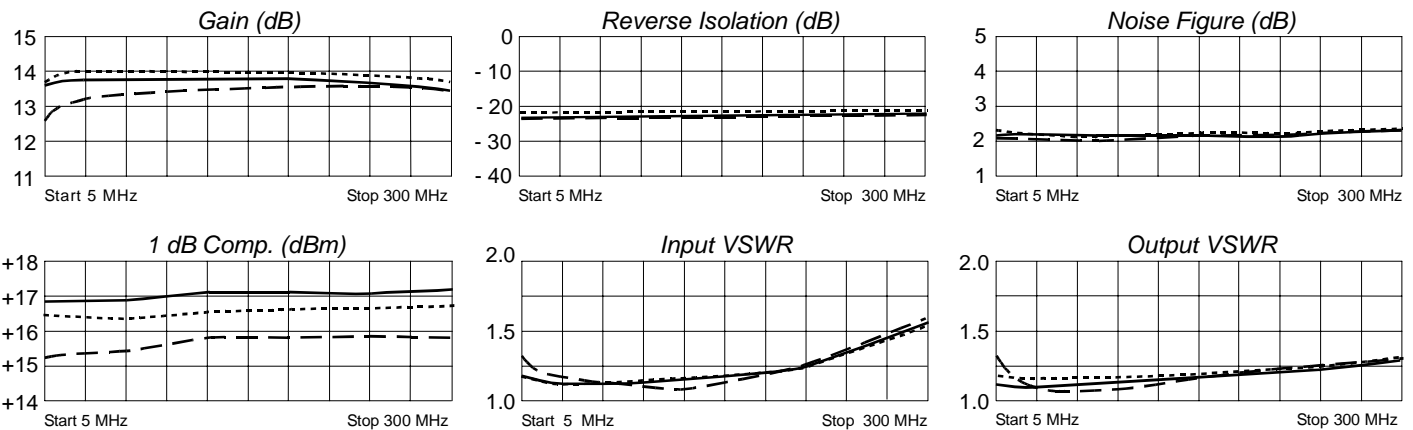
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 300 MHz	5 - 300 MHz
Gain (dB)	13.5	12.5 Min.
Power @ 1 dB Comp. (dBm)	+16.0	15.0 Min.
Reverse Isolation (dB)	-22	-21 Max.
VSWR In	1.5:1	1.7:1 Max.
Out	1.5:1	1.5:1 Max.
Noise Figure (dB)	2.1	3.1 Max.
Power Vdc	+15	+15 Min.
mA	45	50 Max.

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

### 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 ..... +13 dBm  
 Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 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	.19	-98	4.72	-159	.076	-158	.09	-27
20	.10	-150	4.92	179	.076	178	.06	-18
50	.09	-168	4.92	170	.077	171	.05	- 9
100	.08	-173	4.93	156	.077	157	.04	- 7
150	.07	-162	4.92	142	.077	145	.03	-13
200	.07	-141	4.93	129	.077	129	.03	-13
250	.11	-135	4.93	116	.076	117	.02	24
300	.16	-141	4.88	102	.077	107	.03	55



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