

# RF AMPLIFIER

## MODEL *TM5325*

Available as: TM5325, 4 Pin TO-8 (T4)  
 TN5325, 4 Pin Surface Mount (SM3)  
 FP5325, 4 Pin Flatpack (FP4)  
 BX5325, Connectorized Housing (H1)  
 PN5325, 4 Pin Surface Mount (SM11)

### Features

- Low Noise Figure: 2.0 dB Typical
- High Output Power: +24 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	5-125 MHz	10-100 MHz
Gain (dB)	20.5	20.5 ± 1.0
Power @ 1 dB Comp. (dBm)	+24	+22.5 Min.
Reverse Isolation (dB)	-24	-23 Max.
VSWR In	1.70:1	2.2:1 Max.
Out	1.35:1	2.0:1 Max.
Noise Figure (dB)	2.0	3.0 Max.
Power Vdc	+12	+12 Min.
mA	85	95

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

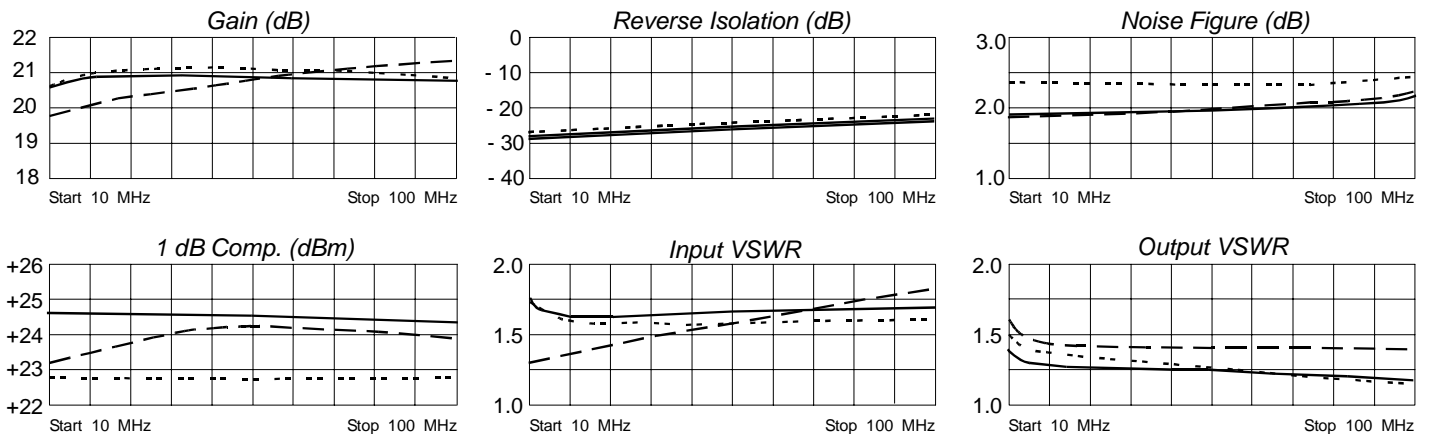
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +58 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +52 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 ..... + 15 Volts  
 Continuous RF Input Power ..... + 18 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 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	.35	- 32	10.28	-157	.05	-159	.27	- 27
10	.27	- 28	10.95	-171	.05	-174	.16	- 32
50	.23	- 36	11.12	161	.06	151	.11	- 3
100	.26	- 68	11.10	139	.06	127	.10	- 10
150	.32	-106	10.87	115	.07	103	.06	- 29



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