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: 3.0 dB Typical
- High Output Power: +24 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
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 Out	1.70:1 1.35:1	2.2:1 Max. 2.0:1 Max.
Noise Figure (dB)	3.0	3.5 Max.
Power Vdc mA	+12 85	+12 Min. 95

Revision: April 21, 2026
ECN: Updated NF value from 3 dB to 3.5 dB

Typical Intermodulation Performance at 25 º 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.)

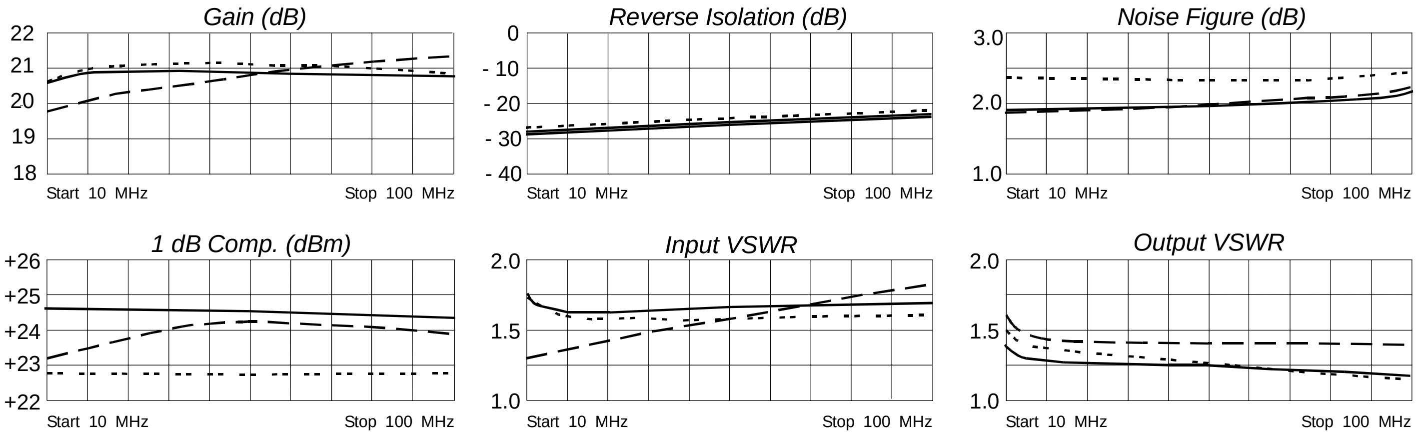
(Intermod values are measured at midband)

Maximum (NO DAMAGE) Ratings

Ambient Operating Temperature .... -55ºC to + 100 ºC
Storage Temperature .... -62ºC to + 125 ºC
Case Temperature .... + 125 ºC
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.)

Note: Care should always be taken to effectively ground the case of each unit. Guaranteed when tested in a 50 ohm circuit.

Typical Performance Data



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 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

www.spectrumcontrol.com

2707 Black Lake Place, Philadelphia, Pennsylvania 19154
PH (215) 464-4000 · Fax (215) 464-4001

SPECTRUM CONTROL