

RF AMPLIFIER

MODEL *TM9313*

Available as: TM9313, 4 Pin TO-8 (T4)
 TN9313, 4 Pin Surface Mount (SM3)
 FP9313, 4 Pin Flatpack (FP4)
 BX9313, Connectorized Housing (H1)

Features

- Medium Gain 16 dB Typical
- Medium Output Power: +12 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 - 1000 MHz	5 - 1000 MHz
Gain (dB)	16	15 Min.
Power @ 1 dB Comp. (dBm)	+12	+10 Min.
Reverse Isolation (dB)	-18	-17 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3.5	4.5 Max.
Power Vdc	+15	+15
mA	29	32 Max.

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

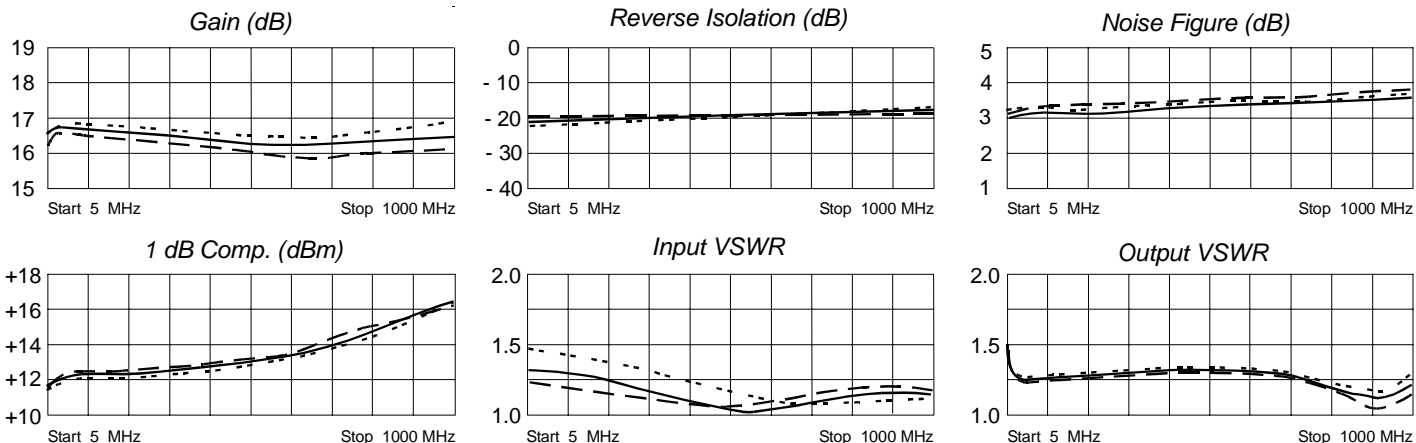
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+41 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+35 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+23 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 + 13 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - + 85 °C ····· -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.15	-133	6.64	-170	.09	12	.18	149
50	.13	178	6.88	173	.09	1	.11	153
100	.13	169	6.84	164	.10	-0	.11	140
200	.11	155	6.78	147	.10	-1	.12	112
400	.06	128	6.62	115	.10	-7	.15	63
600	.01	-94	6.52	84	.11	-14	.14	28
800	.06	-111	6.57	50	.12	-21	.09	5
1000	.06	-149	6.68	12	.13	-31	.10	70



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