

RF AMPLIFIER

MODEL *TM9363*

Available as: TM9363, 4 Pin TO-8 (T4)
 TN9363, 4 Pin Surface Mount (SM3)
 FP9363, 4 Pin Flatpack (FP4)
 BX9363, Connectorized Housing (H1)
 PN9363, Reduced Size Surface Mount (SM11)

Features

- High Gain: 16.5 dB Typical
- Low Noise Figure: <3 dB 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)	16.5	15.0 Min.
Power @ 1 dB Comp. (dBm)	+6.0	+4.0 Min.
Reverse Isolation (dB)	-18.5	-17.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3.0	4.0 Max.
Power Vdc	+15	+15
mA	16	20 Max.

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

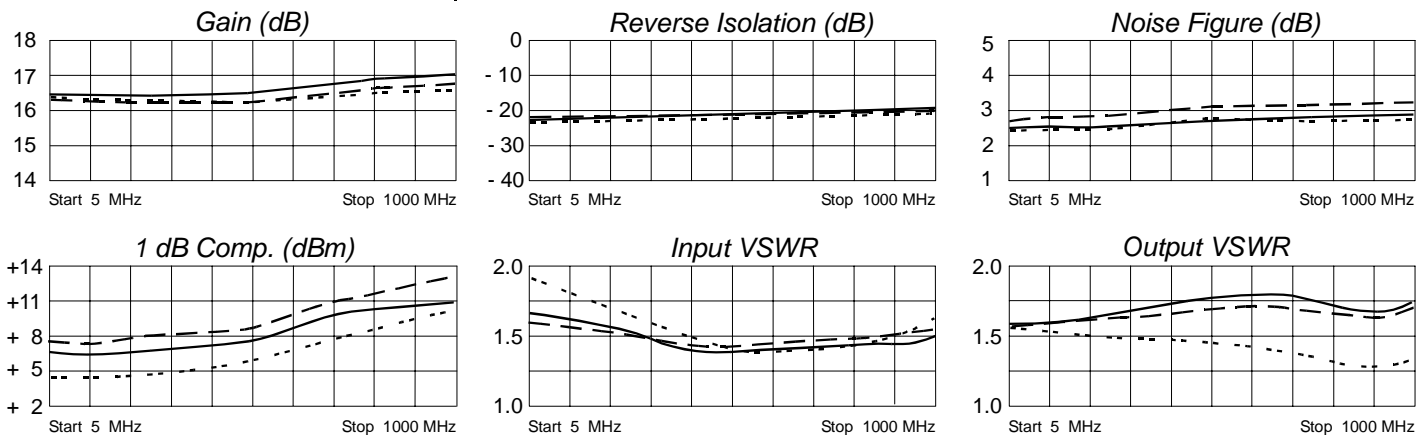
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +31 dBm (Typ.)
 Second Order Two Tone Intercept Point +25 dBm (Typ.)
 Third Order Two Tone Intercept Point +19 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	.21	-176	6.77	-176	.09	5	.23	-175
50	.21	175	6.72	172	.09	- 1	.22	169
100	.20	170	6.69	163	.09	- 2	.22	159
200	.19	161	6.58	147	.09	- 4	.22	138
400	.14	148	6.39	115	.10	- 8	.21	99
600	.10	149	6.29	84	.10	-15	.18	67
800	.09	154	6.32	51	.11	-21	.13	35
1000	.06	-173	6.13	14	.12	-33	.04	95
1200	.07	-167	5.92	- 27	.13	-45	.19	107



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532

Rev
2/22/07

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001