

RF AMPLIFIER

MODEL **TM9118**

Available as: TM9118, 4 Pin TO-8 (T4)
 TN9118, 4 Pin Surface Mount (SM3)
 FP9118, 4 Pin Flatpack (FP4)
 BX9118, Connectorized Housing (H1)

Features

- Output Power: 16 dBm Typical
- Gain: 14.7 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	10 - 800 MHz	10 - 800 MHz
Gain (dB)	14.7	13.5 Min.
Power @ 1 dB Comp. (dBm)	+16	+15 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	4.5	5.5 Max.
Power Vdc	+15	+15
mA	45	47 Max.

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

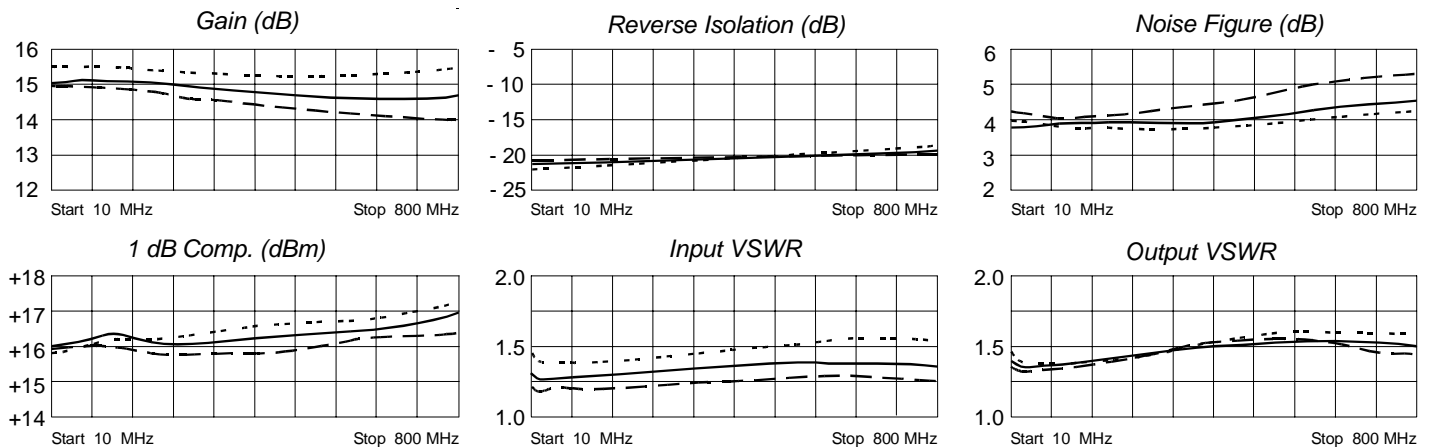
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+39 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+33 dBm (Typ.)
 Third Order Two Tone Intercept Point+26 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
10	.17	-155	6.02	-175	.08	6	.17	160
50	.16	176	6.06	173	.09	2	.15	158
100	.16	165	6.03	164	.09	1	.15	143
200	.17	148	5.88	147	.09	- 1	.16	114
400	.17	118	5.51	116	.10	- 2	.19	67
600	.17	89	5.30	88	.11	- 8	.20	31
800	.17	57	5.34	58	.12	-15	.19	- 2
1000	.13	19	5.53	25	.13	-23	.15	- 21



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 7/26/04

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