

RF AMPLIFIER

MODEL *TM9117*

Available as: TM9117, 4 Pin TO-8 (T4)
 TN9117, 4 Pin Surface Mount (SM3)
 FP9117, 4 Pin Flatpack (FP4)
 BX9117, Connectorized Housing (H1)
 RN9117, 4 Pin Surface Mount (SM19)

Features

- Medium Gain: 12 dB Typical
- Medium Output Power: +15.5 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	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	12.0	10.0 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+14.5 Min.
Reverse Isolation (dB)	-14.5	-13.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	4.0	6.0 Max.
Power Vdc	+15	+15
mA	46	47 Max.

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

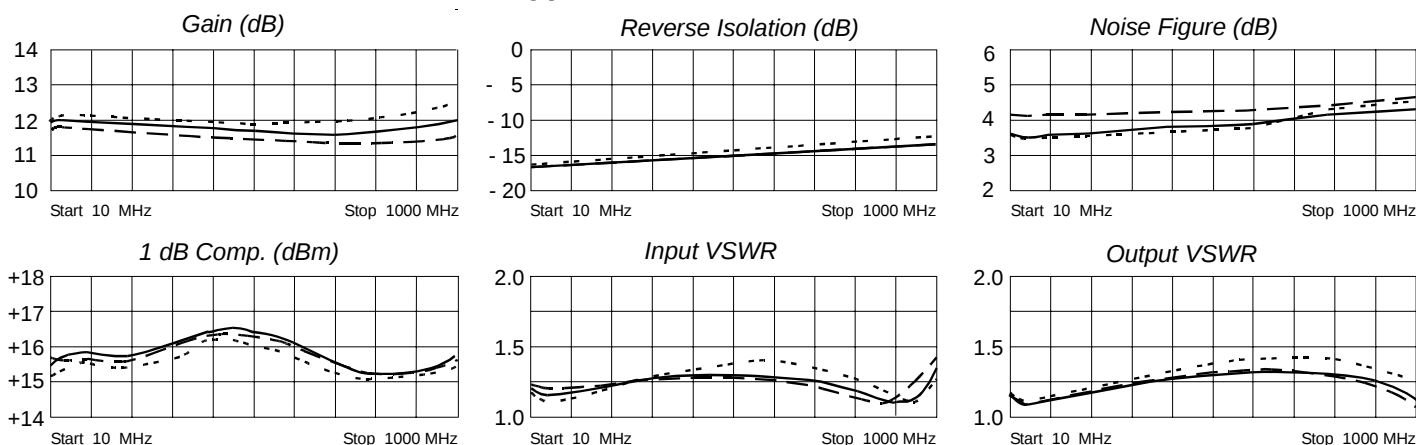
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+46 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+40 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+28 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	.09	-23	3.94	-177	.15	4	.06	59
50	.07	3	3.97	173	.15	-1	.04	-13
100	.08	12	3.96	165	.15	-3	.05	-45
200	.10	22	3.95	149	.15	-7	.08	-78
400	.14	17	3.90	118	.15	-14	.13	-121
600	.14	-2	3.87	88	.17	-23	.17	-153
800	.09	-45	3.89	56	.18	-34	.15	170
1000	.16	169	4.01	18	.20	-53	.05	97



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