

RF AMPLIFIER

MODEL *TM9119*

Available as: TM9119, 4 Pin TO-8 (T4)
 TN9119, 4 Pin Surface Mount (SM3)
 FP9119, 4 Pin Flatpack (FP4)
 BX9119, Connectorized Housing (H1)

Features

- Medium Gain: 9 dB Gain Typical
- High Output Power: +21 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)	9	7.0 Min.
Power @ 1 dB Comp. (dBm)	+21	+19.0 Min.
Reverse Isolation (dB)	- 13	- 12 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	8.5	11.0 Max.
Power Vdc	+15	+15
mA	100	110 Max.

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

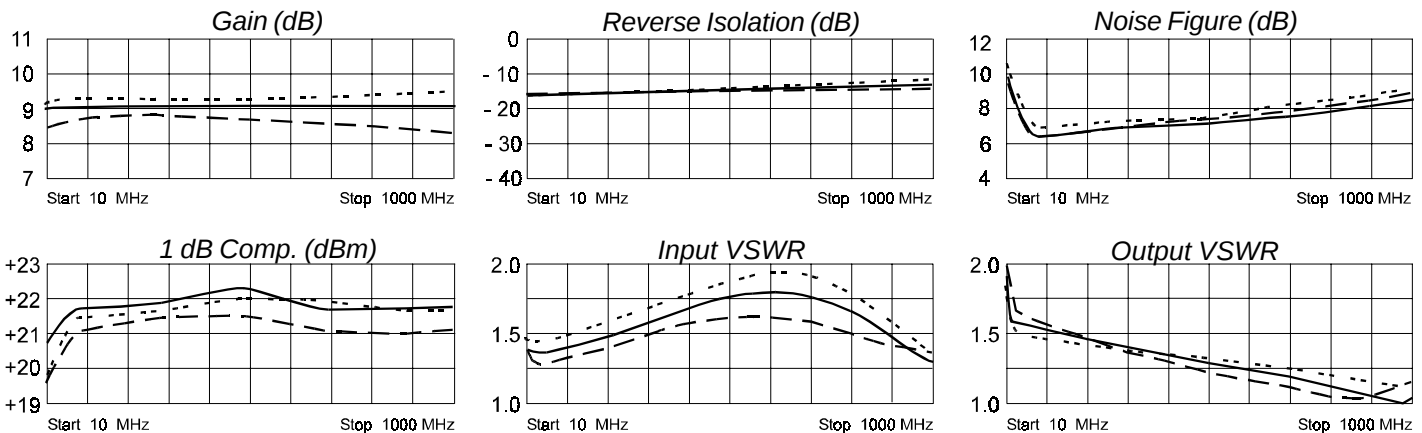
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +45 (Typ.)
 Second Order Two Tone Intercept Point +40 (Typ.)
 Third Order Two Tone Intercept Point +34 (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 + 18 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	.16	-131	2.82	-170	.15	13	.27	154
50	.15	174	2.83	175	.17	2	.22	167
100	.16	154	2.84	167	.17	0	.21	165
300	.22	101	2.84	136	.18	-5	.17	144
500	.27	67	2.83	106	.19	-11	.13	131
700	.27	41	2.83	75	.21	-20	.08	121
900	.19	26	2.85	44	.22	-31	.03	101
1000	.13	38	2.84	27	.22	-39	.02	-47

Amplifonix

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