

RF AMPLIFIER

MODEL *TM6119*

Available as: TM6119, 4 Pin TO-8 (T4)
 TN6119, 4 Pin Surface Mount (SM3)
 FP6119, 4 Pin Flatpack (FP4)
 BX6119, Connectorized Housing (H1)

Features

- High Output Power: +23 dBm Typical
- High Third Order Intercept: +36 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	30 - 250 MHz	30 - 250 MHz
Gain (dB)	8 ± 0.5	6.5 Min.
Power @ 1 dB Comp. (dBm)	>+21	+20 Min.
Reverse Isolation (dB)	-13	-12 Max.
VSWR In	1.7:1	2.3:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	3.0	3.5 Max.
Power Vdc	+15	+15
mA	43	50 Max.

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

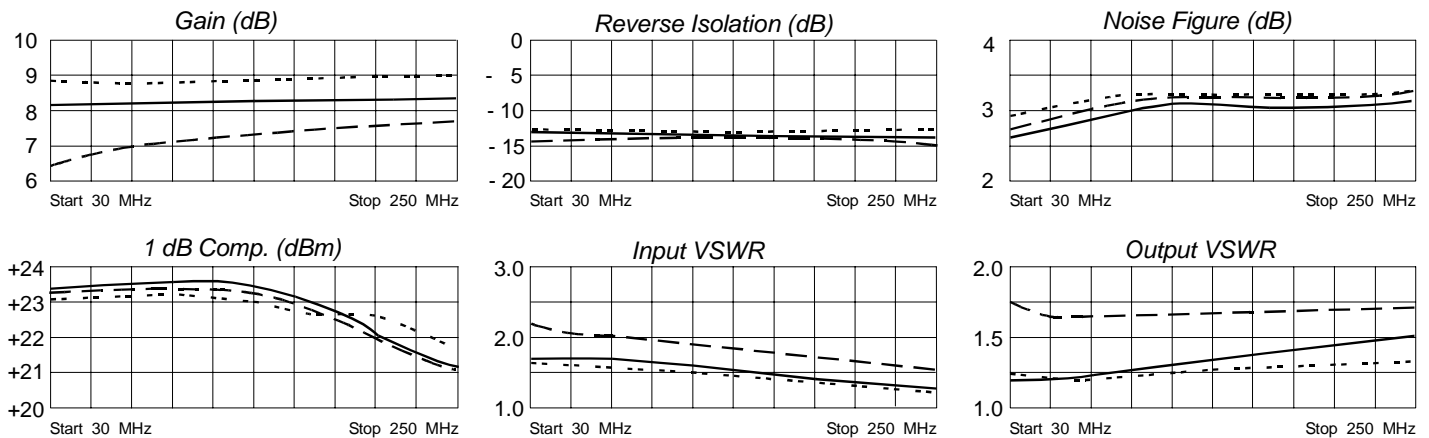
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +45 dBm (Typ.)
 Third Order Two Tone Intercept Point +36 dBm (Typ.)

Absolute Maximum (No Damage) 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 100 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
30	.25	166	2.63	- 4	.22	- 5	.08	117
50	.24	160	2.62	-11	.22	-12	.09	109
100	.23	143	2.59	-25	.21	-26	.13	86
150	.20	126	2.61	-38	.21	-40	.18	70
200	.16	112	2.61	-52	.20	-54	.21	60
250	.11	107	2.63	-66	.20	-68	.22	52



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