

RF AMPLIFIER

MODEL *TM6118*

Available as: TM6118, 4 Pin TO-8 (T4)
 TN6118, 4 Pin Surface Mount (SM3)
 FP6118, 4 Pin Flatpack (FP4)
 BX6118, Connectorized Housing (H1)

Features

- Low Noise: <2 dB Typical
- High Intercept: >+33 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 - 200 MHz	10 - 200 MHz
Gain (dB)	10	10 ± .6 Min.
Power @ 1 dB Comp. (dBm)	+18	+16.5 Min.
Reverse Isolation (dB)	- 12.5	- 12 Max.
VSWR In	1.2:1	2.0:1 Max.
Out	1.2:1	2.0:1 Max.
Noise figure (dB)	1.5	2.0 Max.
Power Vdc	+15	+15
mA	18	20 Max.

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

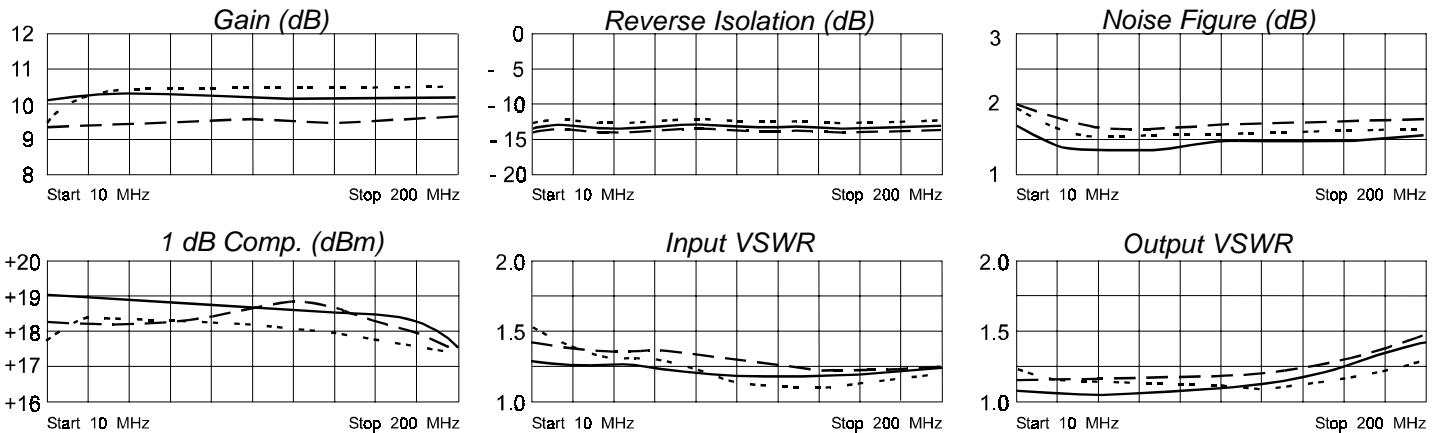
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +59 (Typ.)
 Second Order Two Tone Intercept Point +55 (Typ.)
 Third Order Two Tone Intercept Point +33 (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	.14	169	3.18	4	.23	4	.05	112
25	.12	171	3.24	-5	.23	-4	.02	92
50	.12	171	3.23	-14	.23	-12	.02	108
100	.09	172	3.21	-29	.23	-27	.05	125
150	.08	-164	3.24	-44	.22	-42	.10	122
200	.12	-135	3.22	-61	.21	-57	.17	113



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