

RF AMPLIFIER

MODEL *TM5118*

Available as: TM5118, 4 Pin TO-8 (T4)
 TN5118, 4 Pin Surface Mount (SM3)
 FP5118, 4 Pin Flatpack (FP4)
 BX5118, Connectorized Housing (H1)

Features

- Low Noise Figure: <1.5 dB Typical
- Medium Gain: 16.5 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	3-100 MHz	3-100 MHz
Gain (dB)	16.3	15.5 Min.
Power @ 1 dB Comp (dBm)	+6.5	+5.5 Min.
Reverse Isolation (dB)	-28.5	-28 Max.
VSWR In	<1.75:1	<2.5:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise Figure (dB)	1.5	2.0 Max.
Power Vdc	+15	+15
mA	21	24 Max.

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

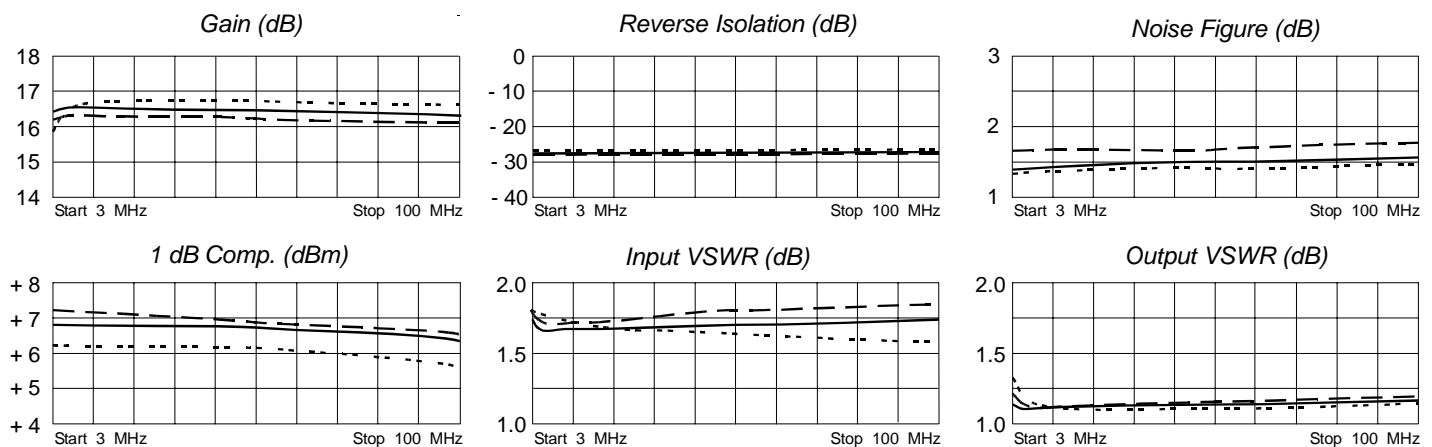
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +31 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +25 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +19 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
3	.29	-14	6.47	-173	.03	-173	.05	-39
10	.27	-5	6.56	179	.03	178	.04	-6
25	.28	-6	6.55	172	.03	171	.04	12
50	.28	-10	6.48	164	.03	161	.06	24
100	.28	-22	6.45	148	.04	143	.08	27
200	.28	-65	6.46	113	.04	110	.11	10

