

RF AMPLIFIER

MODEL *TM9518*

Available as: TM9518, 4 Pin TO-8 (T4)
 TN9518, 4 Pin Surface Mount (SM3)
 BX9518 Connectorized Housing (H1)

Features

- Wide 10 - 1000 MHz Bandwidth
- Medium Gain: +16 dB Typical
- Operating Temp. - 55 °C to +85 °C

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +47 dBm (Typ.)
 Second Order Two Tone Intercept Point +41 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 dBm (Typ.)

Specifications

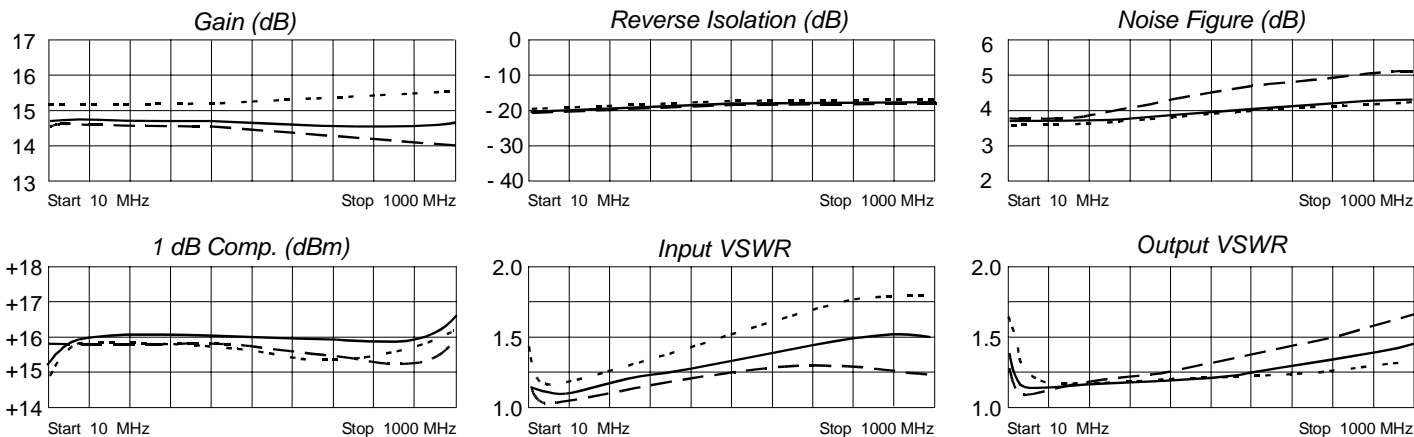
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	14.7	13.5 Min.
Power @ 1 dB Comp. (dBm)	+16	+14.5 Min.
Reverse Isolation (dB)	-18.5	-17 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.5 Max.
Power Vdc	+15	+15
mA	44	50 Max.

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 100 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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

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	.17	-160	5.20	-176	.11	6	.19	163
50	.17	174	5.27	171	.12	-2	.17	169
100	.16	160	5.25	161	.12	-6	.16	163
200	.14	134	5.24	141	.12	-12	.14	150
400	.08	51	5.25	102	.13	-26	.06	131
600	.15	-50	5.27	60	.13	-45	.06	-108
800	.23	-107	5.21	15	.14	-65	.16	-137
1000	.10	-171	5.11	-37	.14	-87	.15	-177



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