

RF AMPLIFIER

MODEL *TM9182*

Available as: TM9182, 4 Pin TO-8 (T4)
 TN9182, 4 Pin Surface Mount (SM3)
 FP9182, 4 Pin Flatpack (FP4)
 BX9182, Connectorized Housing (H1)

Features

- Higher Power: 26 dBm Typical
- Low Phase Noise Bi-Polar Design
- 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)	12	11 Min.
Power @ 1 dB Comp. (dBm)	+26	+24 Min.
Reverse Isolation (dB)	-12	-11 Max.
VSWR In	1.8:1*	2.0:1 Max.
Out	1.8:1*	2.0:1 Max.
Noise Figure (dB)	5.5	8.0 Max.
Power Vdc	+15	+15
mA	150	155 Max.

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

Typical Intermodulation Performance at 25 °C

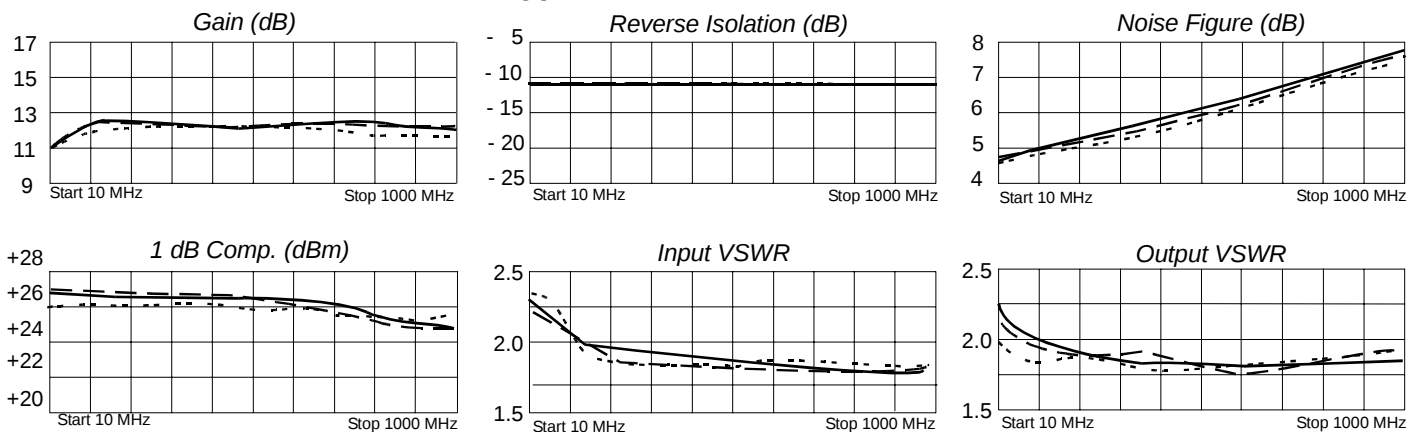
Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +35 dBm (Typ.)

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

*Input and Output VSWR: 2.5:1 Max. from 10-100 MHz.

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	.35	-164	4.41	.0999	9	175	1.20	.58
100	.34	178	4.40	.1000	-1	162	1.21	.57
200	.34	172	4.37	.1020	-3	146	1.21	.57
300	.35	166	4.35	.1058	-6	129	1.19	.58
400	.35	157	4.36	.1076	-8	113	1.19	.58
500	.34	146	4.44	.1138	-11	95	1.15	.61
600	.32	132	4.53	.1206	-15	75	1.12	.63
700	.28	111	4.64	.1322	-20	54	1.07	.67
800	.24	81	4.72	.1442	-27	28	1.03	.71
900	.22	35	7.70	.1571	-36	-3	1.00	.73
1000	.26	-18	4.44	.1676	-48	-45	.98	.73



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