

RF AMPLIFIER

MODEL *TM6182*

Available as: TM6182, 4 Pin TO-8 (T4)
 TN6182, 4 Pin Surface Mount (SM3)
 FP6182, 4 Pin Flatpack (FP4)
 BX6182, Connectorized Housing (H1)

Features

- High Gain: 28.5 dB Typical
- Low Noise Figure: 2.7 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	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	28.5	27.2 Min.
Power @ 1 dB Comp. (dBm)	> +11.7	+9.5 Min.
Reverse Isolation (dB)	-37	-33 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	2.7	3.6 Max.
Power Vdc	+15	+15
mA	44	48 Max.

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

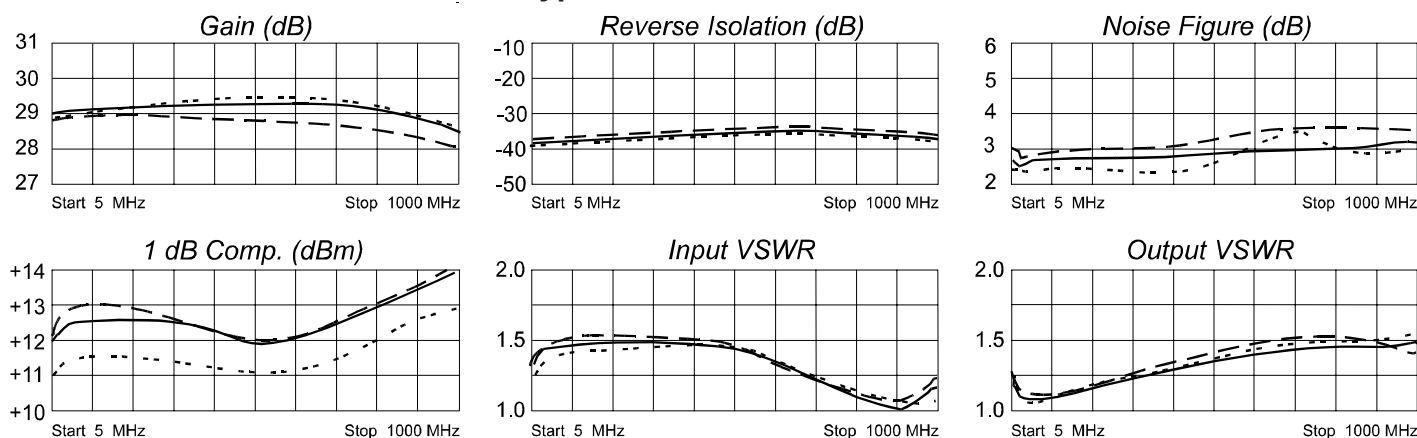
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +33 dBm (Typ.)
 Second Order Two Tone Intercept Point +31 dBm (Typ.)
 Third Order Two Tone Intercept Point +22 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 +6 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.2 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.
5	.15	0	26.85	6	.01	10	.09	163
105	.18	-36	28.25	-33	.01	0	.04	89
204	.19	-70	28.48	-65	.01	-12	.07	56
304	.19	-104	28.67	-98	.01	-11	.10	28
403	.19	-137	29.04	-131	.01	-28	.13	0
503	.17	-170	29.17	-165	.01	-40	.15	-29
602	.15	156	29.31	161	.01	-43	.18	-61
702	.12	125	29.01	126	.01	-46	.19	-96
801	.07	94	28.77	90	.01	-62	.19	-138
901	.01	128	28.12	52	.01	-63	.19	171
1000	.07	-173	26.73	13	.01	-59	.20	107



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