

RF AMPLIFIER

MODEL TM7382

Available as: TM7382, 4 Pin TO-8 (T4)
 TN7382, 4 Pin Surface Mount (SM3)
 FP7382, 4 Pin Flatpack (FP4)
 BX7382, Connectorized Housing (H1)

Features

- High Reverse Isolation: -32 dB Typical
- High Output Power: +17.5 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	20 - 300 MHz	20 - 250 MHz
Gain (dB)	18	16.0 Min.
Power @ 1 dB Comp. (dBm)	+17.5	+16.0 Min.
Reverse Isolation (dB)	-32	-30.0 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.2:1	1.4:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15 Min.
mA	45	53 Max.

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

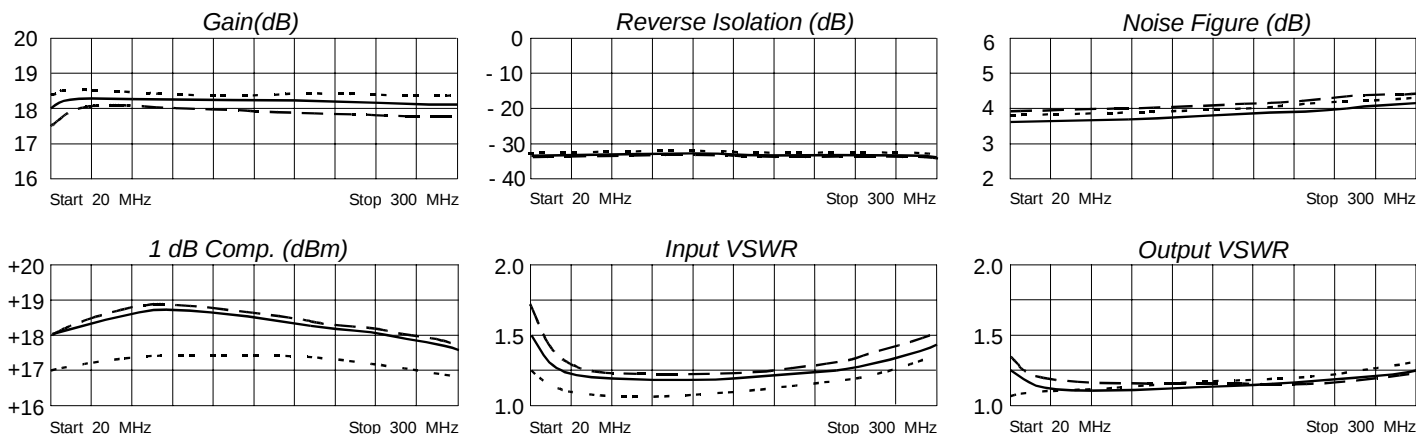
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +37 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +31 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +29 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 + 10 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
20	.20	-66	7.99	-167	.02	11	.11	87
50	.10	-66	8.22	167	.02	- 0	.07	52
100	.07	-67	8.20	141	.02	-16	.06	20
150	.08	-70	8.16	118	.02	-17	.07	- 11
200	.10	-72	8.13	95	.02	-28	.07	- 44
250	.15	-81	8.11	72	.02	-41	.08	- 99
300	.21	-94	8.00	46	.01	-65	.13	-146



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