

RF AMPLIFIER

MODEL *TM6507*

Available as: TM6507, 4 Pin TO-8 (T4)
 TN6507, 4 Pin Surface Mount (SM3)
 FP6507, 4 Pin Flatpack (FP4)
 BX6507, Connectorized Housing (H1)

Features

- Gain: 15.5 dB Typical
- Output Power: +24 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	10 - 500 MHz	10 - 500 MHz
Gain (dB)	15.5	14.0 Min.
Power @ 1 dB Comp. (dBm)	+24	+20.0 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.7:1	2.0:1 Max.
Noise figure (dB)	4.0	6.0 Max.
Power Vdc	+15	+15
mA	110	120 Max.

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

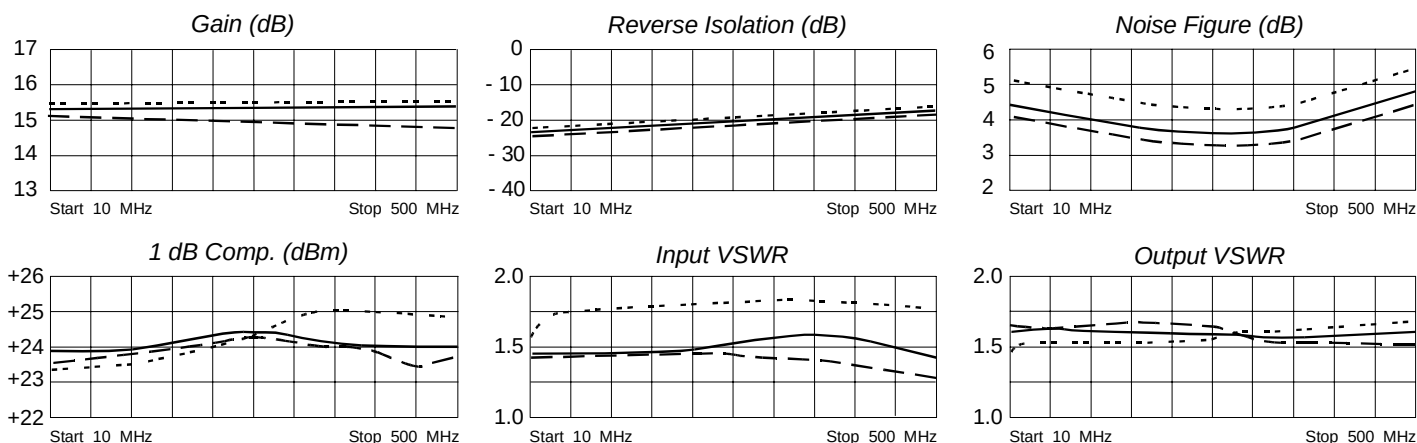
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +46 dBm (Typ.)
 Second Order Two Tone Intercept Point +40 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 + 18 dBm
 Short Term RF Input Power 100 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
10	.16	-136	5.94	-171	.10	10	.20	144
50	.14	177	6.13	172	.10	1	.12	158
100	.14	159	6.12	161	.10	- 1	.12	155
200	.14	134	6.04	139	.10	- 4	.11	141
300	.13	117	5.96	119	.11	- 8	.11	119
400	.12	108	5.88	98	.12	-11	.10	103
500	.12	114	5.79	77	.12	-18	.11	85



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