

RF AMPLIFIER

MODEL TM6440

Available as: TM6440, 4 Pin TO-8 (T4)
 TN6440, 4 Pin Surface Mount (SM3)
 FP6440, 4 Pin Flatpack (FP4)
 BX6440, Connectorized Housing (H1)

Features

- Low Current Drain: 15mA with +9 dBm Output
- Medium Gain: +13 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)	13.0	12.0 Min.
Power @ 1 dB Comp. (dBm)	+9.0	+7.5 Min.
Reverse Isolation (dB)	-18.5	-17.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	3.6	5.0 Max.
Power Vdc	+15	+15
mA	15	17 Max.

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

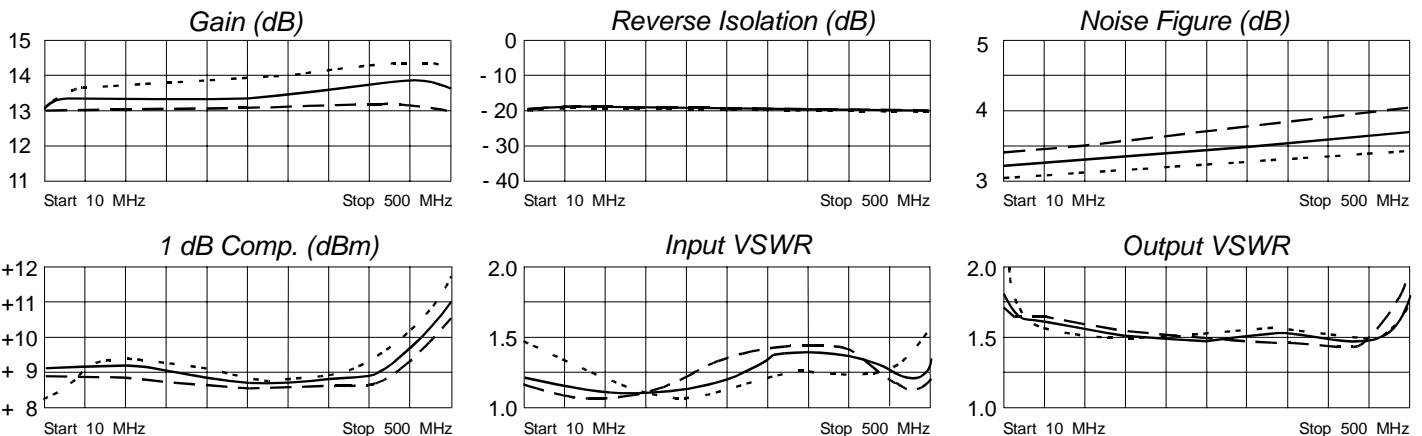
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+38 dBm (Typ.)
 Second Order Two Tone Intercept Point +33 dBm (Typ.)
 Third Order Two Tone Intercept Point +23 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..... 50 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	.10	-125	4.62	-175	.11	7	.29	165
50	.08	172	4.78	165	.12	- 8	.23	176
100	.05	136	4.78	147	.12	- 20	.22	179
200	.04	- 4	4.74	112	.11	- 42	.20	-168
300	.12	- 76	4.76	76	.11	- 66	.20	-154
400	.15	-130	4.91	36	.11	- 93	.16	-135
500	.11	95	4.91	- 17	.10	-131	.30	- 82



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