

RF Amplifier

Low 5 Volt Operation

Model TM6444

10 to 400 MHz

Features

- Low 5 Volt Operation
- High Efficiency: 15 mA at +5V
- 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 - 400 MHz	10 - 400 MHz
Gain (dB)	13	12.0 Min.
Power @ 1 dB Comp. (dBm)	+11	+9.0 Min
Reverse Isolation (dB)	-18	-17 Max.
VSWR In	1.50:1	2.0:1 Max.
VSWR Out	1.50:1	2.0:1 Max.
Noise figure (dB)	<4.0	5.5 Max.
Power Vdc	+5	+5
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+43 dBm (Typ.)
 Second Order Two Tone Intercept Point +37 dBm (Typ.)
 Third Order Two Tone Intercept Point+25 dBm (Typ.)

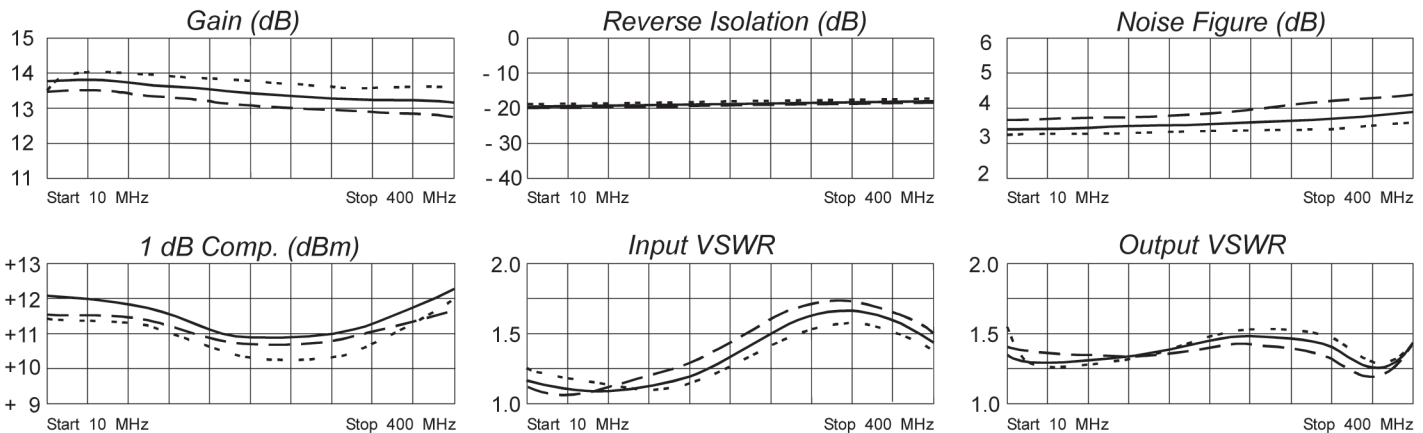
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 10 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power.50 Milliwatts (1Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Packaging Options (see Appendix)

TM6444, 4 Pin TO-8 (T4)
 TN6444, 4 Pin Surface Mount (SM3)
 FP6444, 4 Pin Flatpack (FP4)
 BX6444, Connectorized Housing (H1)

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	.19	- 87	4.60	-164	.10	16	.33	154
10	.11	-105	4.75	-175	.10	7	.26	158
50	.06	-139	4.87	160	.11	- 10	.19	165
100	.05	-125	4.85	137	.11	- 23	.15	165
200	.14	- 92	4.72	91	.11	- 50	.11	-161
300	.23	-110	4.55	44	.11	- 80	.14	-159
400	.18	-110	4.41	- 13	.11	-122	.09	23
500	.50	- 82	2.98	- 87	.07	179	.67	- 59



A Spectrum Control Business

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SPECTRUM MICROWAVE • 2144 Franklin Drive N.E. • Palm Bay, Florida 32905 • Phone: (888) 553-7531 • Fax: (888) 553-7532
 SPECTRUM CONTROL GmbH • Hansastrasse 6 • 91126 Schwabach, Germany • Phone: (49)-9122-795-0 • Fax: (49)-9122-795-58