

RF AMPLIFIER

MODEL *TM6443*

Available as: TM6443, 4 Pin TO-8 (T4)
 TN6443, 4 Pin Surface Mount (SM3)
 FP6443, 4 Pin Flatpack (FP4)
 BX6443, Connectorized Housing (H1)

Features

- Low Power Drain: 10 mA @+5 Volts Typical
- Output Power: +6.5 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	10 - 400 MHz	10 - 400 MHz
Gain (dB)	13.2	12.0 Min.
Power @ 1 dB Comp. (dBm)	+6.5	+5.0 Min.
Reverse Isolation (dB)	-17	-15 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3.5	5.0 Max.
Power Vdc	+5	+5
mA	10	12 Max.

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

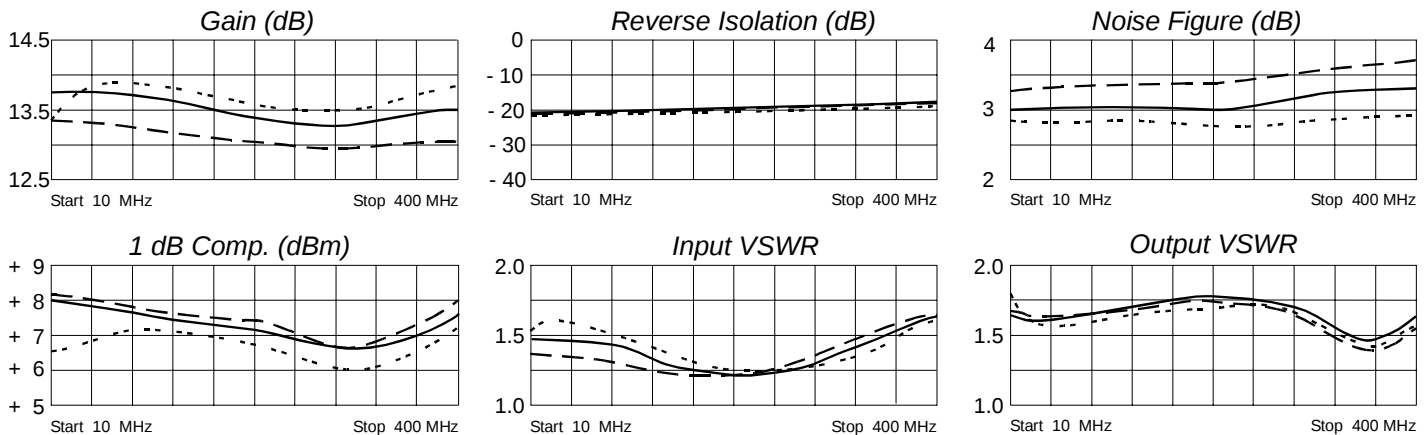
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +33 dBm (Typ.)
 Second Order Two Tone Intercept Point +27 dBm (Typ.)
 Third Order Two Tone Intercept Point +19 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 (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
5	.15	-158	4.86	-179	.11	3	.22	172
50	.14	169	4.89	161	.11	- 9	.21	-175
100	.11	154	4.84	141	.12	- 19	.24	-169
200	.03	-177	4.71	100	.12	- 39	.29	-176
300	.12	-137	4.72	58	.12	- 61	.28	154
400	.16	157	4.87	6	.13	- 97	.27	54
500	.25	11	3.52	- 65	.10	-150	.69	- 52



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/10/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001