

RF AMPLIFIER

MODEL *TM7712*

Available as: TM7712, 4 Pin TO-8 (T4)
 TN7712, 4 Pin Surface Mount (SM3)
 FP7712, 4 Pin Flatpack (FP4)
 BX7712, Connectrized Housing (H1)

Features

- High Output Power: +24 dBm Typical
- High Third Order Intercept: +41 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	5-250 MHz	5-250 MHz
Gain (dB)	10.5	9.5 Min.
Power @ 1 dB Comp. (dBm)	+24	+20.0 Min.
Reverse Isolation (dB)	-12.5	-11.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+12	+12 Min.
mA	70	75 Max.

Typical Intermodulation Performance at 25 °C

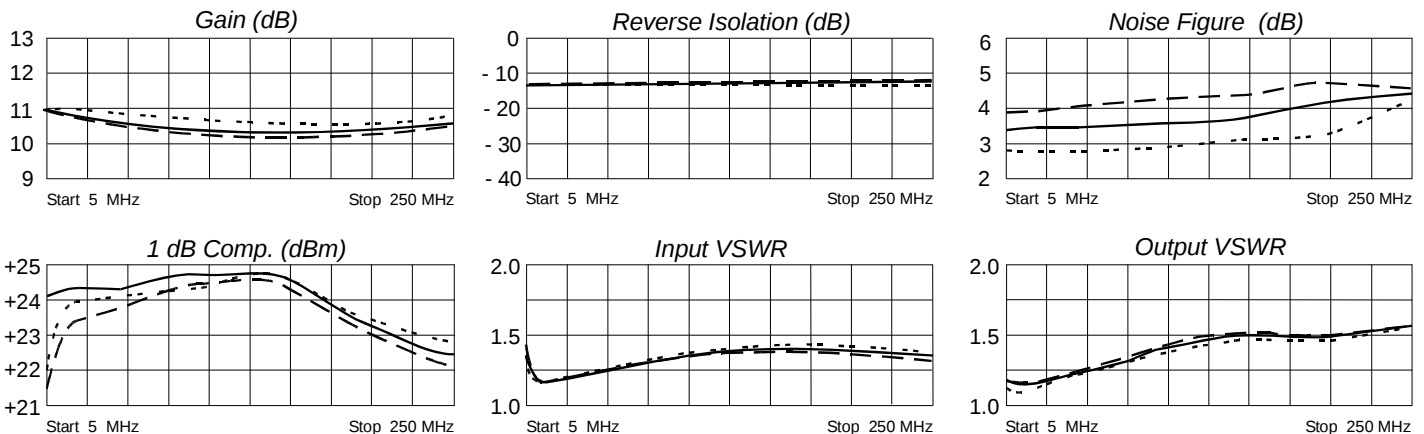
Second Order Harmonic Intercept Point..... +54 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +48 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +41 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Continuous RF Input Power + 18 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power.....0.5 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.
 Revision 5/18/2012

Typical Performance Data



Linear S-Parameters

FREQ. MHz	-----S11----- Mag Deg	-----S21----- Mag Deg	-----S12----- Mag Deg	-----S22----- Mag Deg
5	.15 -105	3.56 -170	.21 -173	.08 -93
10	.09 -118	3.53 -180	.22 179	.07 -125
50	.09 -122	3.43 152	.22 151	.11 -146
100	.14 -126	3.34 123	.22 122	.17 -177
150	.17 -132	3.32 96	.23 96	.20 142
200	.18 -134	3.32 67	.24 70	.21 93
250	.17 -130	3.37 38	.24 47	.24 38



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