RF AMPLIFIER
MODEL *TM3012*

Available as: TM3012, 4 Pin TO-8 (T4)
TN3012, 4 Pin Surface Mount (SM3)
FP3012, 4 Pin Flatpack (FP4)
BX3012, Connectorized Housing (H1)

Features

- High Gain: 22 dB Typical
- Output Power: +14 dBm Typical
- Operating Temp. -55 ºC to + 85 ºC
- Screening to the Tables of MIL-STD-883 Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	200 - 450 MHz	200 - 450 MHz
Gain (dB)	22	21 Min.
Power @ 1 dB Comp. (dBm)	+14	+13.5 Min.
Reverse Isolation (dB)	-23	-22 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3.2	4.0 Max.
Power Vdc	+12	+12
mA	33	35 Max.

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

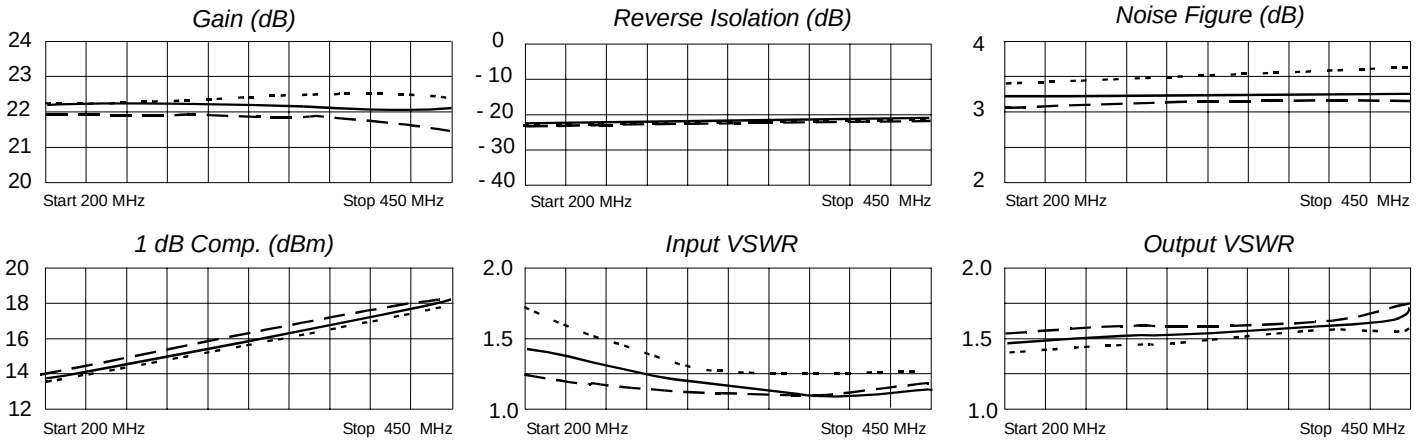
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+43 dBm (Typ.)
Second Order Two Tone Intercept Point.....+36 dBm (Typ.)
Third Order Two Tone Intercept Point.....+27 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- Mag	Deg
200	.14	117	12.70	122	.0581	3	.11	95
250	.10	96	12.61	107	.0599	-0	.11	78
300	.07	91	12.50	92	.0631	-3	.11	62
350	.01	54	12.33	76	.0682	-5	.12	53
400	.07	-118	12.14	60	.0687	-9	.14	47
450	.14	-133	11.71	42	.0753	-13	.18	39

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