

RF AMPLIFIER

MODEL TM3014

Available as: TM3014, 4 Pin TO-8 (T4)
 TN3014, 4 Pin Surface Mount (SM3)
 FP3014, 4 Pin Flatpack (FP4)
 BX3014, Connectorized Housing (H1)

Features

- High Gain: 25 dB Typical
- High Output Power: +24 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	1200 - 1600 MHz	1200 - 1600 MHz
Gain (dB)	25	24 Min.
Power @ 1 dB Comp. (dBm)	+24	+23 Min.
Reverse Isolation (dB)	-38	-36 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<2.5	3.0 Max.
Power Vdc	+15	+15
mA	145	155 Max.

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

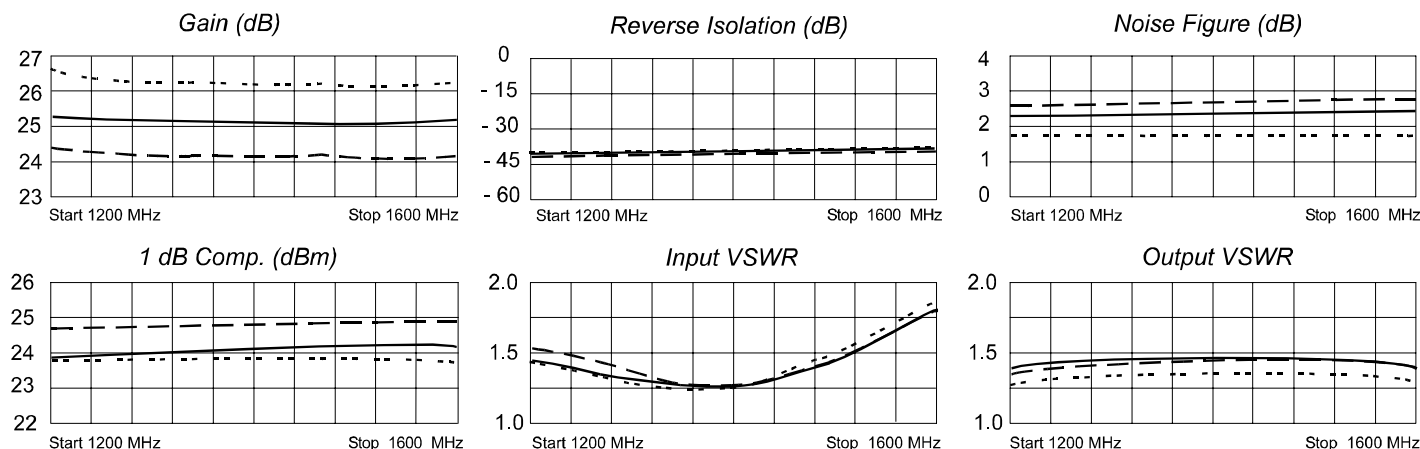
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.... +60 dBm (Typ.)
 Second Order Two Tone Intercept Point.... +54 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +36 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 +6 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
1200	0.21	-26	20.04	108	0.01	-142	0.04	-178
1240	0.20	-32	20.00	98	0.01	-146	0.03	-169
1280	0.20	-37	19.91	88	0.01	-154	0.02	-134
1320	0.20	-43	19.75	78	0.01	-159	0.02	-99
1360	0.19	-48	19.57	69	0.01	-165	0.04	-90
1400	0.19	-53	19.36	59	0.01	-172	0.06	-89
1440	0.18	-58	19.16	49	0.01	-178	0.08	-91
1480	0.18	-61	18.99	40	0.01	-174	0.10	-96
1520	0.17	-63	18.75	30	0.01	-166	0.12	-101
1560	0.18	-65	18.51	21	0.01	-161	0.13	-107
1600	0.18	-66	18.22	11	0.01	-151	0.16	-114

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