

# RF AMPLIFIER

## MODEL *TM3052*

Available as: TM3052, 4 Pin TO-8 (T4)  
 TN3052, 4 Pin Surface Mount (SM3)  
 BX3052, Connectorized Housing (H1)

### Features

- Medium Gain: 11 dB Typical
- Output Power: +23 dBm Typical
- Operating Temp. - 20 °C to + 65 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -20 °C to +65 °C
Frequency	1200-1600 MHz	1200-1600 MHz
Gain (dB)	11	8.5 Min.
Power @ 1 dB Comp. (dBm)	+23	+19 Min.
Reverse Isolation (dB)	-17	-16 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	4.0	5.5 Max.
Power Vdc	+15	+15 Min.
mA	90	100 Max.

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

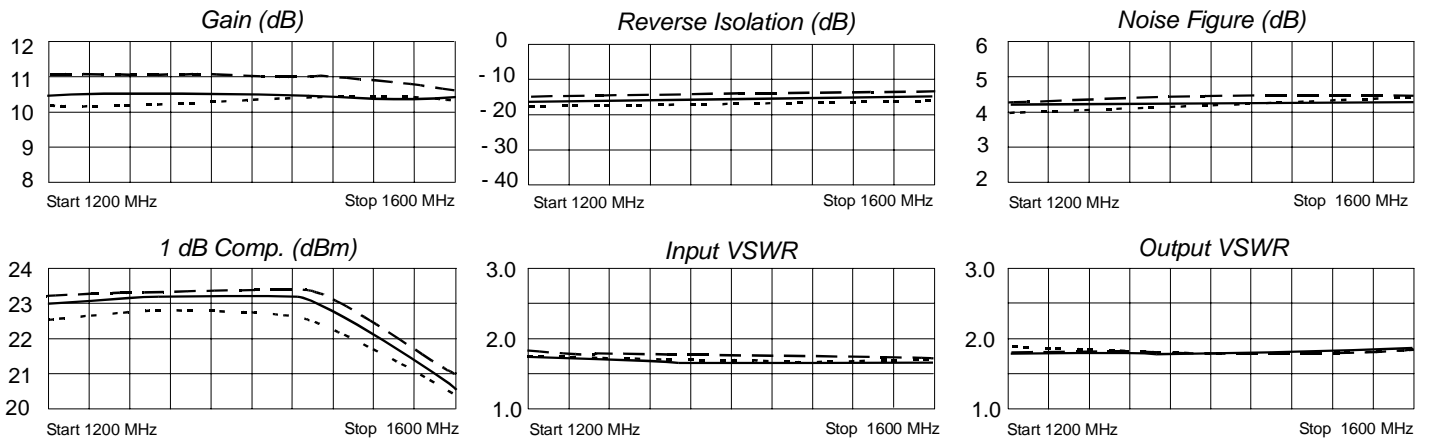
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +52 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +46 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +35 dBm (Typ.)

### Maximum (No Damage) 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 ..... + 15 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    - - - - + 65 °C    ······ -20 °C

### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
1200	.24	-109	3.25	114	.13	-46	.17	5
1300	.24	-115	3.24	108	.13	-51	.18	4
1400	.23	-120	3.27	102	.13	-56	.17	-2
1500	.23	-127	3.29	95	.12	-63	.19	-14
1600	.22	-134	3.29	90	.12	-67	.21	-15



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