

# RF AMPLIFIER

## MODEL *TM5115*

Available as: TM5115, 4 Pin TO-8 (T4)  
 TN5115, 4 Pin Surface Mount (SM3)  
 BX5115, Connectorized Housing (H1)

### Features

- High Output Power: +26 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +55 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +42 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +34 dBm (Typ.)

### Specifications

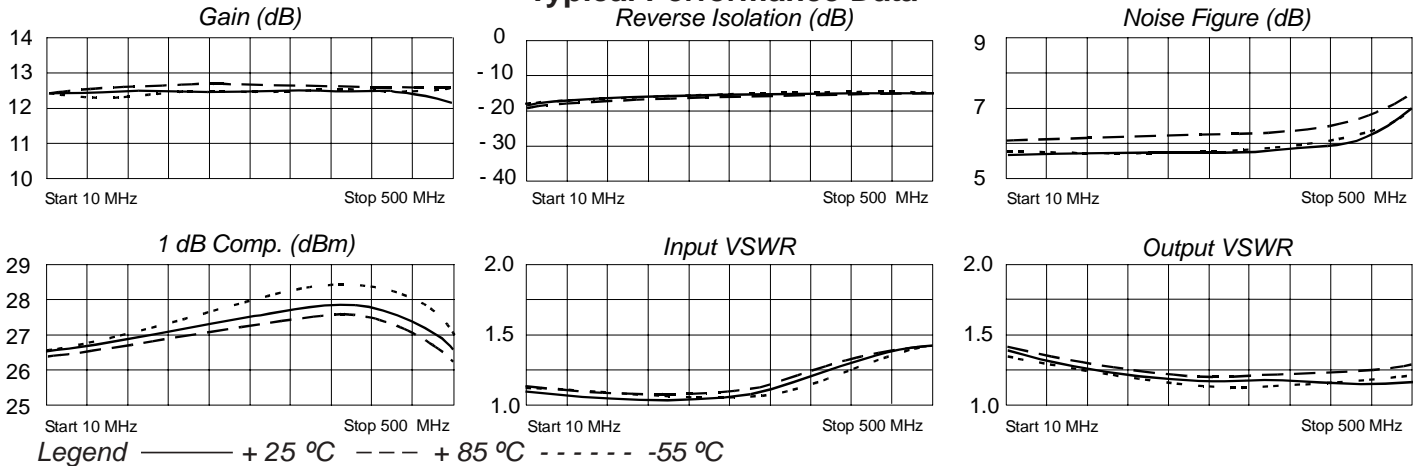
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 500 MHz	10 - 500 MHz
Gain (dB)	12.3	11.5 Min.
Power @ 1 dB Comp. (dBm)	+26	+25 Min.
Reverse Isolation (dB)	-18	-16 Max.
VSWR In	<1.5:1	1.5:1 Max.
Out	<1.5:1	1.5:1 Max.
Noise Figure (dB)	7.8	8.4 Max.
Power Vdc	+15	+15 Min.
mA	165	165 Max.

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 105 °C  
 Storage Temperature ..... -62°C to + 150 °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.)

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

### Typical Performance Data



### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.18	-146	4.15	-173	.1116	8	.20	162
20	.17	-166	4.20	-171	.1127	-1	.18	164
50	.17	-167	4.20	-171	.1123	-1	.18	165
100	.18	-164	4.19	-160	.1121	-4	.18	154
150	.20	-163	4.19	-149	.1115	-8	.17	143
200	.22	-163	4.19	-138	.1115	-10	.17	134
250	.24	-164	4.19	-128	.1099	-12	.17	125
300	.25	-167	4.21	-117	.1090	-16	.17	118
350	.26	-170	4.22	-107	.1092	-17	.16	113
400	.27	-174	4.24	-96	.1090	-20	.16	109
450	.27	-179	4.27	-85	.1088	-22	.16	108
500	.27	-175	4.32	-74	.1097	-24	.16	109



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