

# RF AMPLIFIER

## MODEL *TM6615*

Available as: TM6615, 4 Pin TO-8 (T4)  
 FP6615, 4 Pin Flatpack (FP4)  
 TN6615, 4 Pin .450" Sq. Surface Mount (SM3)  
 BX6615, SMA Connectorized Housing (H1)

### Features

- Output Power: +15.5 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +48 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +42 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +30 dBm (Typ.)

### Specifications

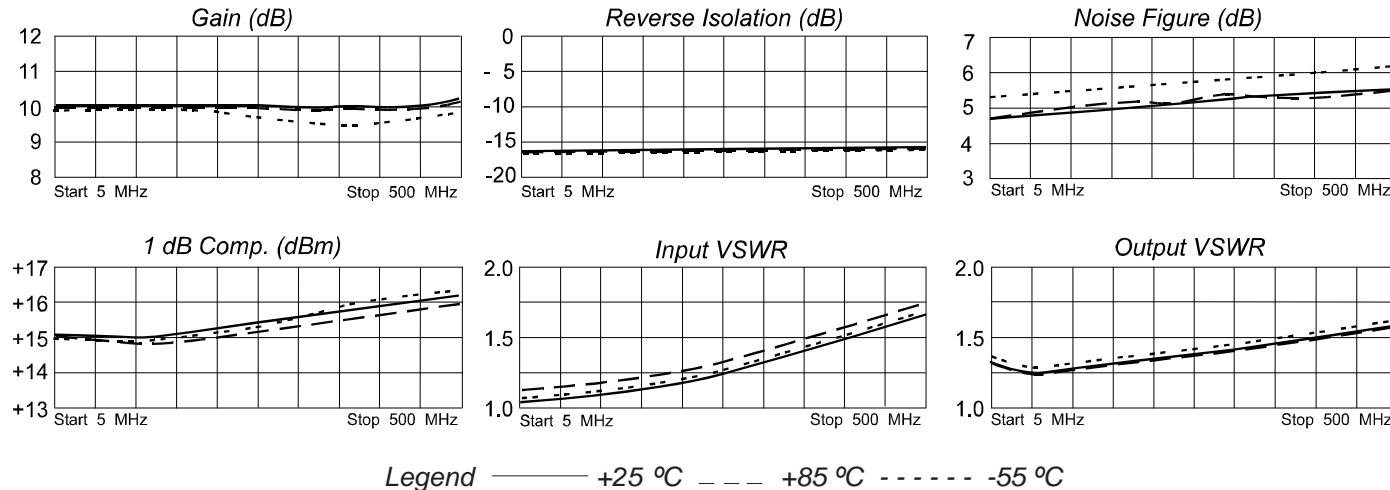
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	10	8.5 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+14.0 Min
Reverse Isolation (dB)	-15.5	-14 Max.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	5.5	7.0 Max.
Power Vdc	+15	+15
mA	50	55 Max.

### Absolute 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 ..... +13 dBm  
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)  
 Thermal Resistance  $\theta_{jc}$  ..... 19.68 °C/watt

Note: Care should always be taken to effectively ground the case of each unit.  
 Revision 12/2/2013

### Typical Performance Data



### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.02	-72	3.20	-178	.14	4	.13	-164
50	.02	-87	3.30	172	.14	1	.13	-176
100	.04	-89	3.19	164	.14	0	.13	-174
200	.09	-107	3.19	148	.15	-0	.15	-170
300	.14	-120	3.18	132	.15	-1	.17	-169
400	.19	-132	3.21	116	.16	-2	.20	-174
500	.26	-145	3.24	100	.17	-2	.23	-180



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