

# RF AMPLIFIER

## MODEL *TM6667*

Available as: TM6667, 4 Pin TO-8 (T4)  
 TN6667, 4 Pin Surface Mount (SM3)  
 FP6667, 4 Pin Flatpack (FP4)  
 BX6667, Connectorized Housing (H1)

### Features

- High Efficiency: +15 dBm Typ. @ 480 mW DC
- Low Noise Figure: < 4.0 dB 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	5 - 700 MHz	5 - 600 MHz
Gain (dB)	14	12.5 Min.
Power @ 1 dB Comp. (dBm)	+15	+14.0 Min.
Reverse Isolation (dB)	- 17	- 16 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<4.0	5.5 Max.
Power Vdc	+15	+15
mA	33	35 Max.

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

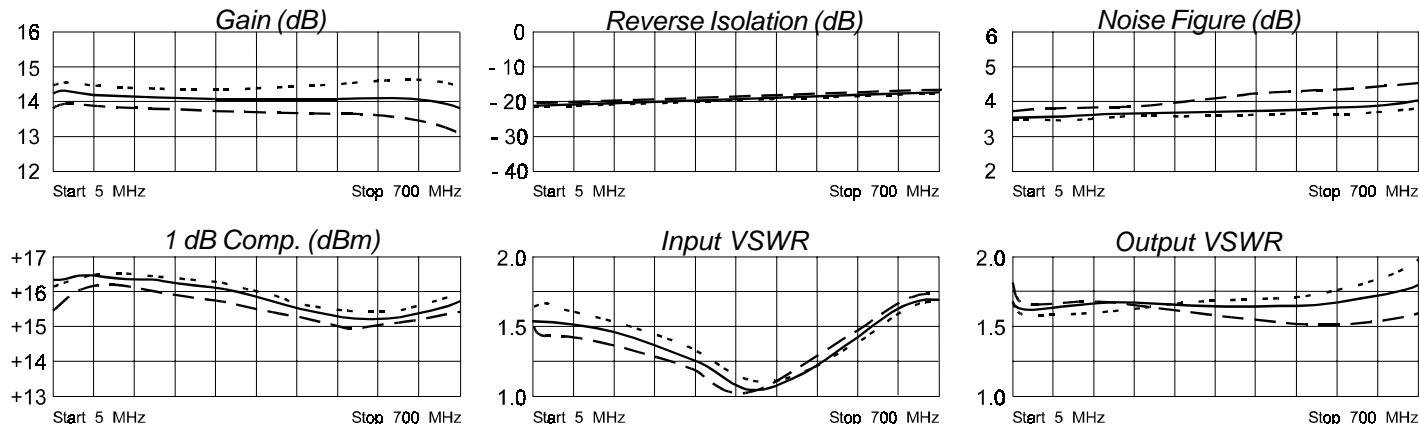
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +51 (Typ.)  
 Second Order Two Tone Intercept Point ..... +45 (Typ.)  
 Third Order Two Tone Intercept Point ..... +30 (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 ..... + 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 °C    - - - + 85 °C    . . . . . -55 °C

### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.23	-163	5.16	-175	.09	6	.25	179
50	.22	173	5.19	168	.09	- 1	.24	176
100	.21	165	5.16	155	.09	- 4	.24	173
200	.16	149	5.09	129	.10	- 9	.25	166
300	.10	130	5.04	104	.11	-15	.25	155
400	.02	50	5.06	77	.11	-22	.25	139
500	.11	- 53	5.05	49	.12	-33	.25	120
600	.21	- 75	5.01	19	.13	-44	.27	92
700	.28	- 94	4.86	- 16	.14	-58	.34	53

# Amplifonix

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