

# RF AMPLIFIER

## MODEL *TM6719*

Available as: TM6719, 4 Pin TO-8 (T4)  
 TN6719, 4 Pin Surface Mount (SM3)  
 FP6719, 4 Pin Flatpack (FP4)  
 BX6719, Connectorized Housing (H1)

### Features

- Low Noise Figure: <1.7 dB Typical
- Medium Output Power: > +9 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +42 (Typ.)  
 Second Order Two Tone Intercept Point ..... +36 (Typ.)  
 Third Order Two Tone Intercept Point ..... +20 (Typ.)

### Specifications

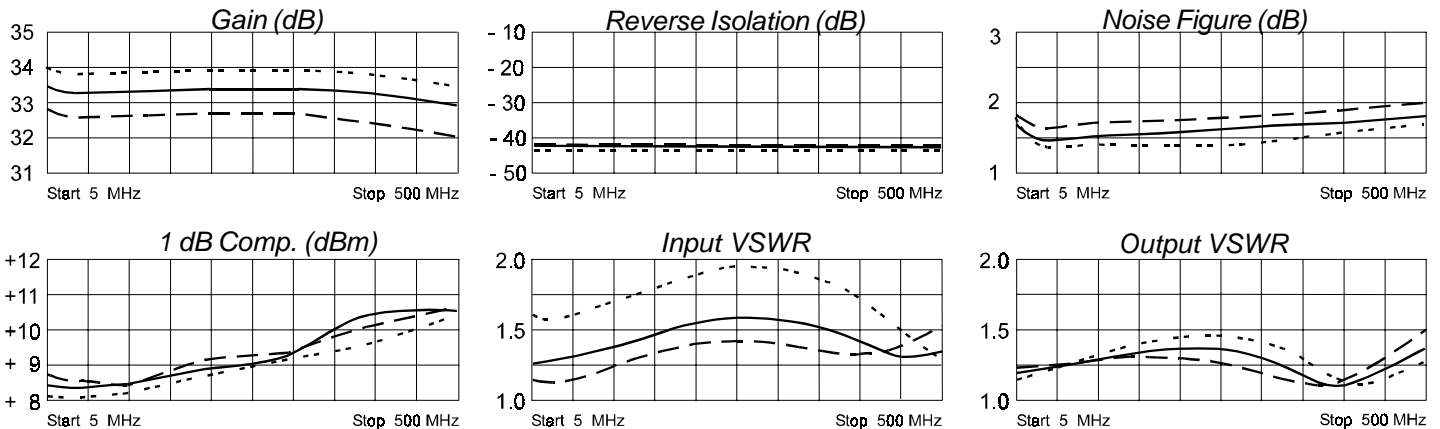
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	33	31.0 Min.
Power @ 1 dB Comp. (dBm)	+9	+8.0 Min.
Reverse Isolation (dB)	-42	-40 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	1.7	2.0 Max.
Power Vdc	+15	+15
mA	35	38 Max.

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

### 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
5	.11	-163	47.18	3	.01	12	.09	-163
50	.13	-166	46.15	-24	.01	-20	.10	-165
100	.16	-165	45.93	-48	.01	-5	.13	-164
200	.20	-173	46.18	-97	.01	-8	.16	-179
300	.21	171	46.31	-147	.01	-16	.13	160
400	.17	165	46.10	160	.01	-25	.06	-171
500	.16	-158	44.77	104	.01	-41	.17	-148



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 •••• FAX 215-464-4001<sub>3/17/03</sub>