

# RF AMPLIFIER

## MODEL *TM9715*

Available as: TM9715, 4 Pin TO-8 (T4)  
 TN9715, 4 Pin Surface Mount (SM3)  
 BX9715, Connectorized Housing (H1)

### Features

- High Output Power: +25 dBm Typical
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+55 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+49 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+40 dBm (Typ.)

### Specifications

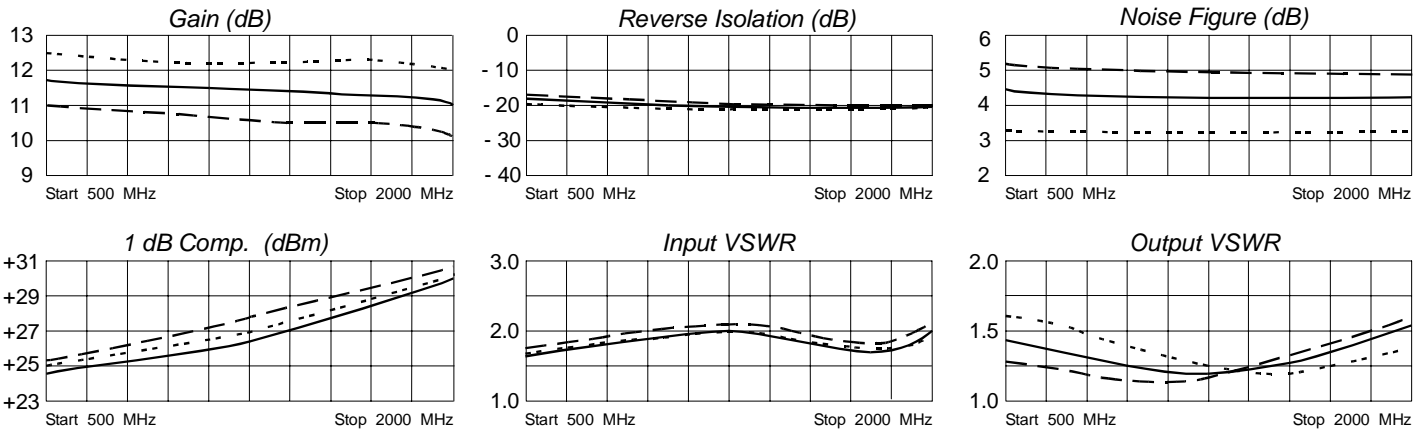
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	500 - 2000 MHz	500 - 2000 MHz
Gain (dB)	11.0	10.0 Min.
Power @ 1 dB Comp. (dBm)	+25.0	+24.0 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	<2.0:1	2.3:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.5	6.0 Max.
Power Vdc	+12	+12
mA	180	220 Max.

### 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 ..... + 20 dBm  
 Short Term RF Input Power .... 200 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



Legend ——— + 25 °C    - - - - + 85 °C    ······ -55 °C

### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
500	.26	-148	3.88	141	.11	- 26	.17	134
750	.31	-165	3.80	118	.10	- 38	.13	104
1000	.34	177	3.76	97	.10	- 48	.09	69
1250	.34	154	3.72	73	.10	- 57	.08	- 4
1500	.31	123	3.64	49	.10	- 67	.08	- 73
1750	.27	72	3.56	22	.10	- 80	.13	-110
2000	.34	5	3.36	- 8	.10	-100	.18	-129



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