

# RF AMPLIFIER

## MODEL *TM9479*

Available as: TM9479, 4 Pin TO-8 (T4)  
 TN9479, 4 Pin Surface Mount (SM3)  
 FP9479, 4 Pin Flatpack (FP4)  
 BX9479, Connectorized Housing (H1)

### Features

- High Gain: 8.3 dB Typical
- High Output Power: +22 dBm 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	100 - 4000 MHz	100 - 4000 MHz
Gain (dB)	8.3	7.0 Min.
Gain Flatness (dB)	±0.3	±0.8 Max.
Power @ 1 dB Comp. (dBm) *	+22.0	+20.0 Min.
Reverse Isolation (dB)	-16	-15 Max.
VSWR In	1.4:1	2.0:1 Max.
Out	1.4:1	2.0:1 Max.
Noise Figure (dB)	4.8	6.0 Max.
Power Vdc	+15	+15
mA	115	126 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 ..... +61 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +55 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +36 dBm (Typ.)

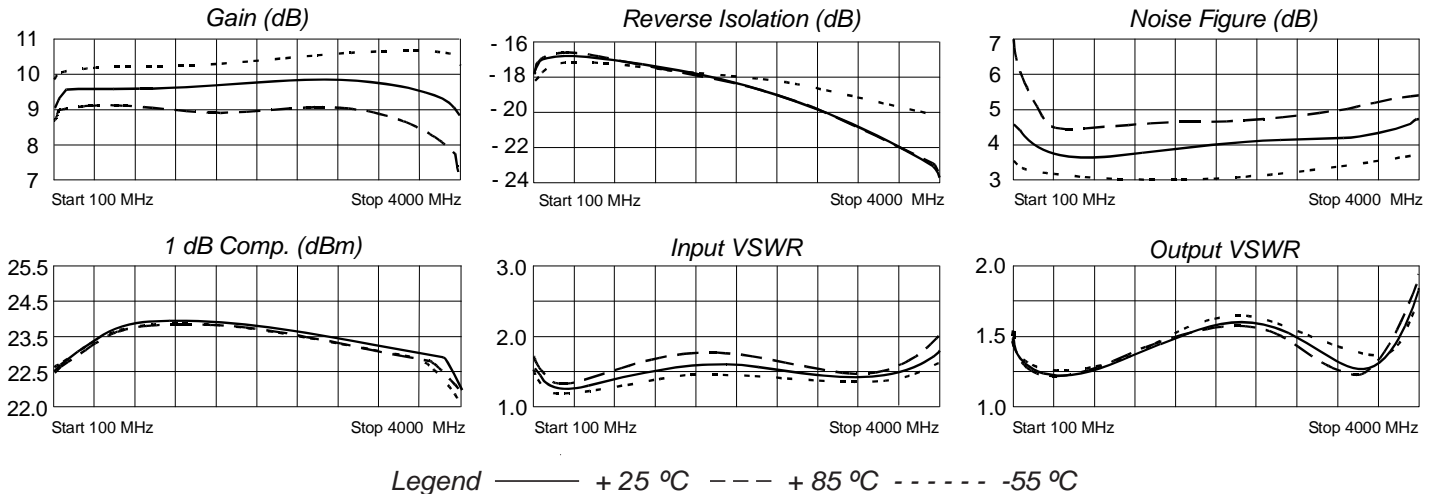
### Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 105 °C  
 DC Voltage ..... + 17 Volts  
 Continuous RF Input Power ..... + 15 dBm  
 Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.25 Watt (3 µsec Max.)

Revision 9-28-2016

ECN: \* Output Power @ 1 dB Compression is 1 dB less at 4 GHz.

### Typical Performance Data



### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
100	.24	41	2.82	-152	.13	29	.22	94
880	.19	-123	3.01	80	.14	-86	.13	-14
1660	.24	152	3.00	-15	.13	-169	.20	-113
2440	.21	62	3.07	-111	.12	110	.23	163
3220	.21	-44	3.06	146	.11	20	.13	50
4000	.36	-143	2.72	29	.07	-75	.30	-141



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532

www.spectrummicrowave.com · Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001