

# AGC AMPLIFIER

## MODEL TMG9553

Available as: TMG9553, 5 Pin TO-8 (T5)

### Features

- 10 MHz to 500 MHz
- AGC Range: 45 dB Typical
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

### Specifications

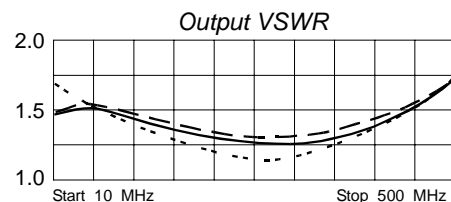
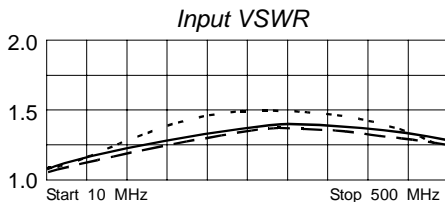
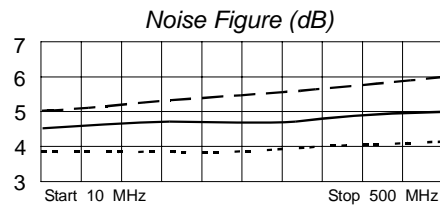
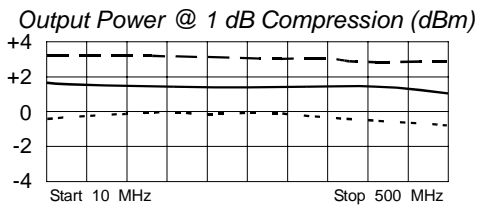
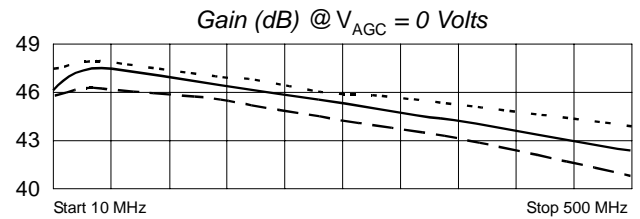
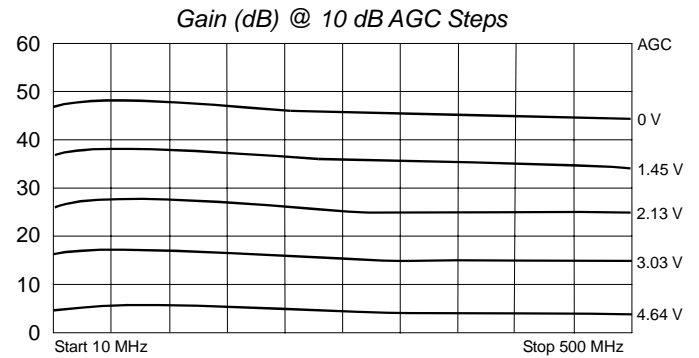
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C	
Frequency	10 - 500 MHz	10 - 500 MHz	
Gain (dB)	44	40 Min.	
Gain Flatness (dB) V <sub>AGC</sub> = 0 to 5 Volts	±2.0	±3.0 Max.	
AGC Range (dB)	45		
Noise Figure (dB) (V <sub>AGC</sub> = 0 V)	5.0	7.0 Max.	
Power Output (dBm) @ 1 dB Compression (V <sub>AGC</sub> = 0 V)	1.0	-2.0 Min.	
Input VSWR	1.5:1	2.0:1 Max.	
Output VSWR	1.5:1	2.0:1 Max.	
Third Order Intercept (dBm)	+13	-	
Second Order Intercept (dBm)	+17	-	
2nd Harmonic Intercept (dBm)	+24	-	
Response Time (µsec)	<20	-	
Bias Power	Vdc mA	+15 50	+15 Min. 60 Max.
AGC Power	Vdc mA	0 to +5 0 to 27	0 to +5 0 to 30 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 ..... + 17 Volts  
 Continuous RF Input Power ..... + 17 dBm

### Typical Performance Data



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



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