

# RF Limiting Amplifier

## Low Phase Shift per dB of Compression

# Model TML9053

## 5 to 500 MHz

### Features

- Frequency: 5 to 500 MHz; Input Power Range: 13 dB
- Low Phase Shift per dB of Compression
- Operating Case Temp. -55 °C to +85 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC  | TYPICAL<br>Ta = 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|---|-----------------------|----------------------------------|
| Frequency   | 5 - 500 MHz           | 5 - 500 MHz                      |
| Small Signal Gain (dB)                                  | 9.5                   | 7.0 Min.                         |
| Saturated Output Power (dBm)                            | -1                    | -4 Min.                          |
| Saturated Flatness(dB)                                  | ± 0.3                 | ± 1.0 Max.                       |
| VSWR Input/Output                                       | 1.6/1.7               | 2.0:1 Max.                       |
| Even Harmonic Suppression @<br>P <sub>IN</sub> = +7 dBm | 12                    | 10 Min.                          |
| Noise figure (dB)                                       | <8.0                  | 10.5 Max.                        |
| Power +Vdc<br>mA  | +15<br>22             | +15<br>24 Max.                   |

### Maximum Ratings

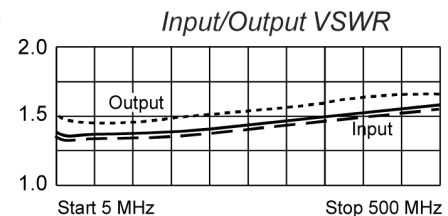
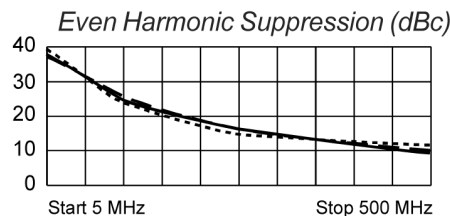
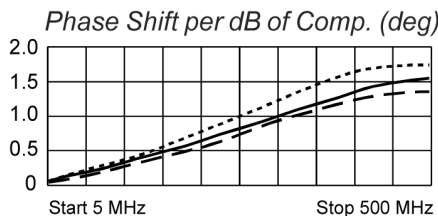
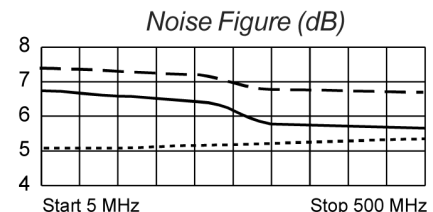
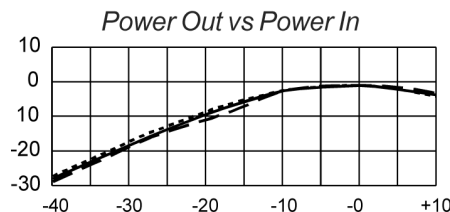
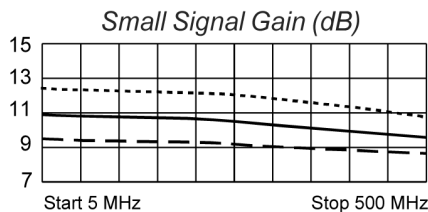
Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... +17 Volts  
 Continuous RF Input Power ..... + 15 dBm

### Packaging Options (see Appendix)

TML9053, 4 Pin TO-8 (T4)  
 TNL9053, 4 Pin Surface Mount (SM3)  
 BXL9053, Connectorized Housing (H1)

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

### Typical Performance Data



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

