

RF Limiting Amplifier

Voltage Variable Limiting Level

Model TL9010

5 to 3200 MHz

Features

- Voltage Variable Limiting Level
- Good Even Order Harmonic Suppression
- Low Insertion Loss
- Low VSWR
- 4 Pin TO-8 Metal Hermetic Package
- Operating Temp. -55 °C to + 100 °C

Specifications

| CHARACTERISTIC | TYPICAL | MIN/MAX |
|--|----------------|----------------|
| Frequency (MHz) | 5-3200 MHz | 5-3000 MHz |
| Insertion Loss @ Pin ≤ -20 dBm (Max) 5-1000 MHz 1000-3000 MHz | 2.0 3.0 | 3.5 5.5 |
| Input VSWR (Max) Pin ≤ -10 dBm, +10 ≤ dBm Bias ≤ +20 Vdc | 1.7:1 | 2.1:1 |
| Output VSWR (Max) Pin ≤ -10 dBm, +10 ≤ dBm Bias ≤ +20 Vdc 5-1000 MHz 1000-3000 MHz | 1.7:1 2.0:1 | 2.2:1 2.5:1 |
| Output Limiting Level Pin = +20 dBm 5-2000 MHz 2000-3000 MHz | 2.5 6.5 | 4.5 7.0 |
| Bias Current (Max) @ 15Vdc @ 20Vdc | 7 10 | 10 15 |

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

Packaging Options (see Appendix)

- TL9010, 4 Pin TO-8 (T4)
- TNL9010, 4 Pin Surface Mount (SM3)
- FPL9010, 4 Pin Flatpack (FP4)
- BXL9010, Connectorized Housing (H1)

Maximum (No Damage) Ratings

- Ambient Operating Temperature -55°C to + 100 °C
- Storage Temperature -62°C to + 125 °C
- Case Temperature + 125 °C
- DC Voltage + 25 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.)

Legend: ___ +5Vdc ___ +10Vdc ___ +15Vdc -----+20Vdc

Typical Performance Data

