

RF Limiting Amplifier

Voltage Variable Limiting Level

Model TL9011

5 to 500 MHz

Features

- Voltage Variable Limiting Level
- Good Even Order Harmonic Suppression
- Low Insertion Loss
- Low VSWR
- Operating Temp. -55 °C to + 85 °C

Specifications

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

CHARACTERISTIC	TYPICAL	MIN/MAX
Frequency	5 - 500 MHz	5 - 500 MHz
Insertion Loss Power Input = -20 dBm V = +15	2.0	3.0 Max.
Output Level at Limiting Threshold (1 dB comp.)		
V = +20	-5	1.0
V = +15	-1.5	0.0
V = +10	-4.0	-2.5
V = +5	-11.0	-9.0
Max. Output Limiting Level @ +20 dBm (100 MHz)		
V = +20	+2.0	+3.0
V = +15	+1.0	+2.0
V = +10	-2.0	0.0
V = +5	-7.0	---
VSWR In	1.7:1	2.0:1 Max.
Out	1.7:1	2.0:1 Max.
Max Input Level (dBm)	-	+26 Max.
Bias Power Vdc	+15	+20
mA	7	10 Max.

Maximum (No Damage) Ratings

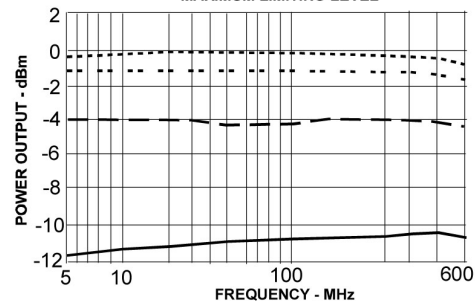
Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 25 Volts
 Continuous RF Input Power + 13dBm
 Short Term RF Input Power 400 Milliwatts (1 Minute Max.)
 Maximum Peak Power 1.0 Watt (3 msec Max.)

Packaging Options (see Appendix)

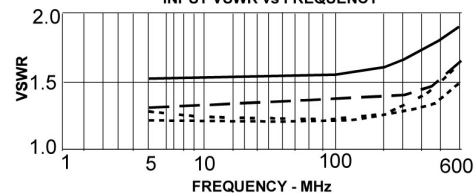
TL9011, 4 Pin TO-8 (T4)
 TNL9011, 4 Pin Surface Mount (SM3)
 FPL9011, 4 Pin Flatpack (FP4)
 BXL9011, Connectorized Housing (H1)

Typical Performance Data

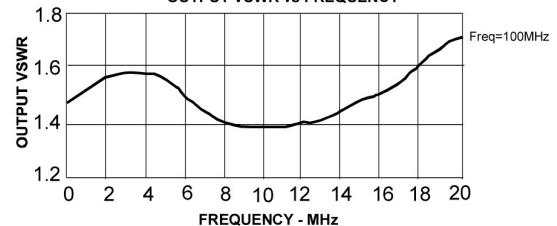
MAXIMUM LIMITING LEVEL



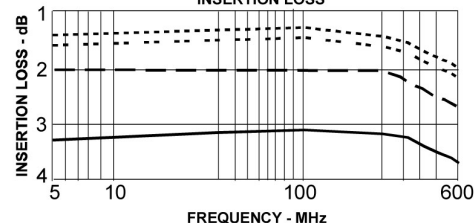
INPUT VSWR vs FREQUENCY



OUTPUT VSWR vs FREQUENCY

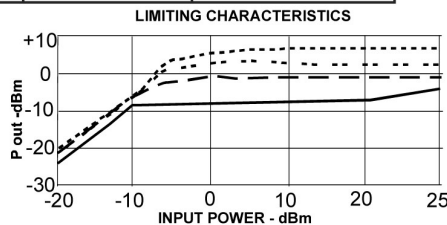


INSERTION LOSS

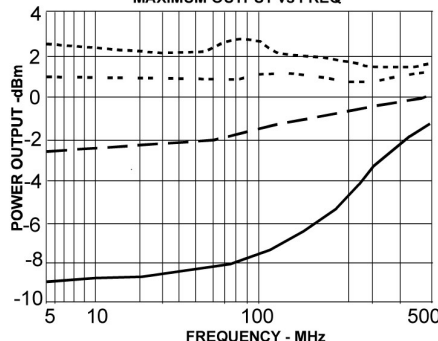


LEGEND:

- +5 Vdc
- - - +10 Vdc
- · · +15 Vdc
- · - +20 Vdc



MAXIMUM OUTPUT vs FREQ



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