

THRESHOLD DETECTOR *TMJ9904*

**PACKAGE: 5 Pin TO-8,
Surface Mount and
Connectorized Housing**

Features

- External Threshold Control ; Voltage or Resistance
- -22 dBm to +10 dBm Input Operating Range
- **Wide 10 MHz to 2000 MHz Bandwidth**

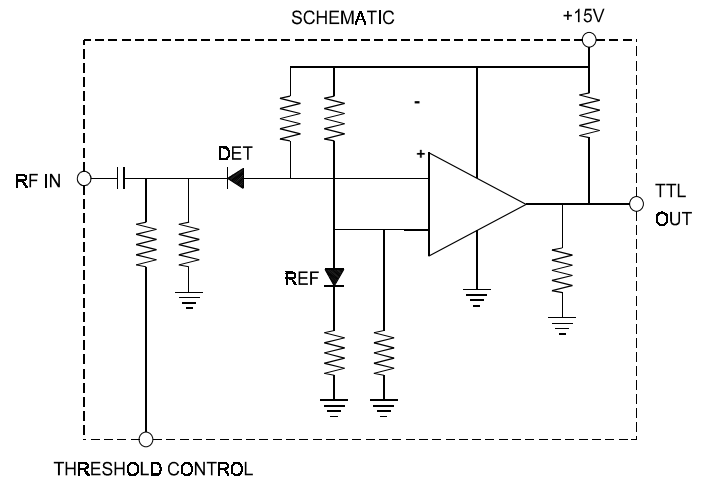
Specifications

CHARACTERISTIC	TYPICAL Ta= 0 to 60 °C	MIN/MAX Ta = -55 °C to +85 °C
Input Flatness (dB) P = -22 to +10dBm	+/- 1.0	+/- 1.5 Max.
Input VSWR (Max)	<1.75:1	2.0:1 Max.
Threshold Control Level (V/Ohms) @ P _{IN} = -22 dBm @ P _{IN} = -20 dBm @ P _{IN} = 0 dBm @ P _{IN} = +10 dBm	.023/180 .026/200 .265/2.0K .870/6.5K	- - - -
Threshold Temp. Stability (dB) @ P _{IN} = -22 dBm @ P _{IN} = -20 dBm @ P _{IN} = 0 dBm @ P _{IN} = +10 dBm	- - - -	+/- 2.5 Max. +/- 1.5 Max. +/- 1.0 Max. +/- 0.5 Max.
Threshold Hysteresis Voltage Control (dB) Resistance Control (dB)	<0.1 >1.0	- -
Output @ P _{IN} = Threshold (V)	3.2	2.7 Min.
Output Short Circuit Current (mA)	8	3.0 Min.
Rise Time/Fall Time (ns)	75	125
Power Vdc m A	+15 3	+15 5 Max.

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

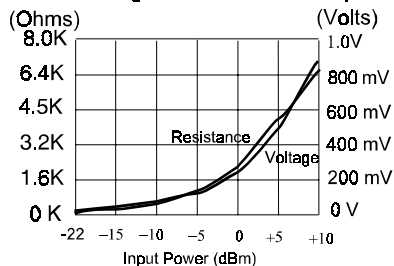
Maximum Ratings

Operating Case Temperature..... - 55 °C to + 125 °C
Storage Temperature..... -62 °C to + 150 °C
Continuous RF Input Power.....+ 15 dBm
DC Voltage.....+ 17 Volts

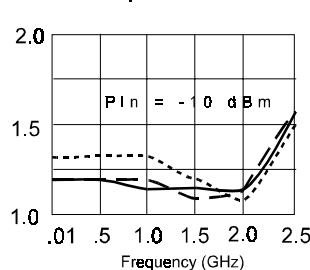


Typical Performance Data

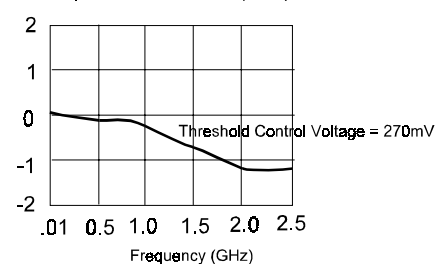
Control Voltage & Resistance vs. Input Power



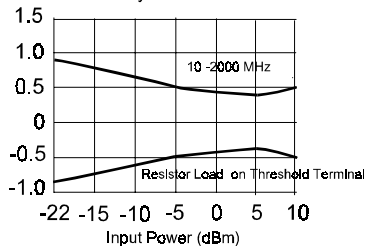
Input VSWR



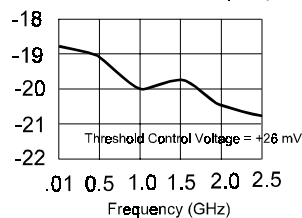
Input Power Flatness (dBm)



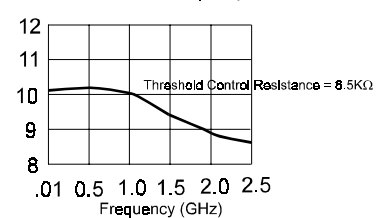
Hysteresis



Threshold Power vs. Frequency



Threshold Power vs. Frequency



Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001