

THRESHOLD DETECTOR

TMJ9924

Available As: TMJ9924, 5 Pin TO-8
TNJ9924, 4 Pin Surface Mount (SM3)
BX9924, Connectorized Housing

Features

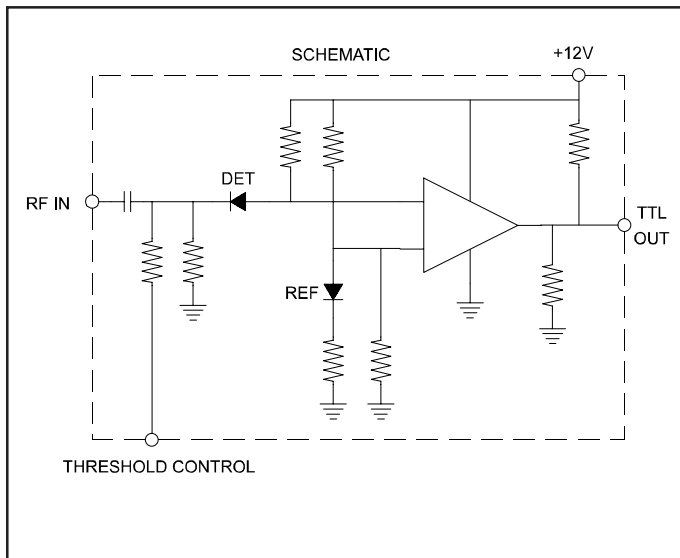
- External Threshold Control ; Voltage or Resistance
- -20 dBm to + 10 dBm Input Operating Range
- Wide 10 MHz to 2000 MHz Bandwidth

Specifications

CHARACTERISTIC	TYPICAL Ta= 0 to 60 °C	MIN/MAX Ta = -55 °C to +85 °C
Input Flatness (dB) P = -20 to + 10dBm	+/- 1.0	+/- 1.5 Max.
Input VSWR (Max)	<1.75:1	2.0:1 Max.
Threshold Control Level (V/Ohms) @ P _{IN} = -20 dBm @ P _{IN} = 0 dBm @ P _{IN} = +10 dBm	.026/200 .265/2.0K .870/6.5K	- - -
Threshold Temp. Stability (dB) @ P _{IN} = -20 dBm @ P _{IN} = 0 dBm @ P _{IN} = +10 dBm	- - -	+/- 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	+12 3	+12 5 Max.

Absolute Maximum (No Damage) Ratings

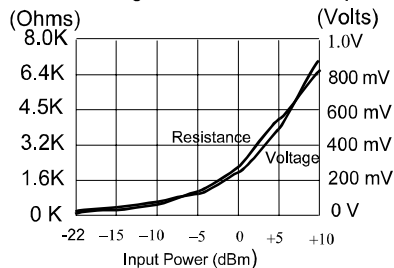
Operating Case Temperature..... - 55 °C to +125 °C
Storage Temperature..... -62 °C to +150 °C
Continuous RF Input Power.....+15 dBm
DC Voltage.....+17 Volts



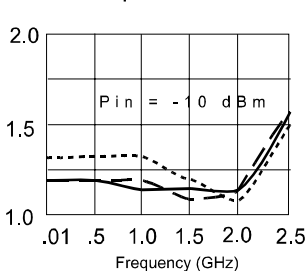
Note: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data

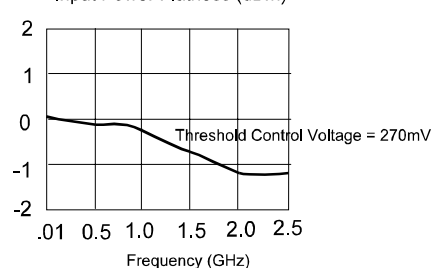
Control Voltage & Resistance vs. Input Power



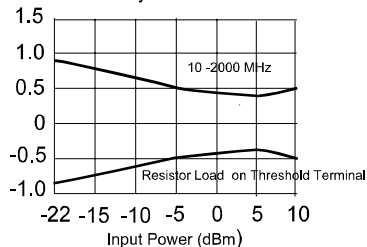
Input VSWR



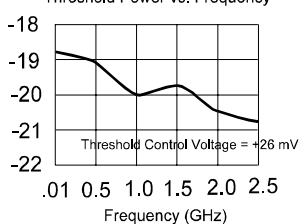
Input Power Flatness (dBm)



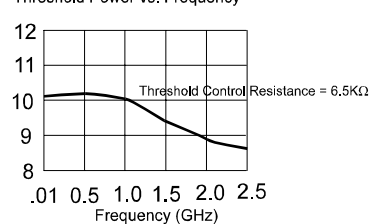
Hysteresis



Threshold Power vs. Frequency



Threshold Power vs. Frequency



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