



## Threshold Detectors 100 MHz to 20 GHz

### FEATURES

- > High Reliability Hermetically Sealed Modules.
- > 10dB Dynamic Range: -20 to -10 dBm (See Note 2)
- > Propagation Delay: 10 nsec Typ., 3 dB above Threshold Setting (50% RF Input to 50% Logic at -10 dBm)
- > TTL: Logic Output
- > Minimum Pulse Width: 50 nsec Typ.
- > Temperature Stability: 1.0 dB Typ., 3 dB above Threshold Setting
- > Threshold Setting: Internal Fixed or External Voltage
- > DC Power (No Load):  $\pm 5$  VDC @ 100 mA Max.

Maximum Input Power: 100mW CW  
 Operating Temperature Range: -55°C to +90°C  
 Storage Temperature Range: -65°C to +125°C  
 Specification @ +25°C

Model No.	Frequency (GHz)	VSWR (Typ.)	Threshold Variation ( $\pm$ dB Max.)
Broad Band Threshold Detectors			
TH0120	0.1 - 2.0	2.0:1	0.75
TH0140	0.1 - 4.0	2.6:1	0.75
TH0112	0.1 - 12.4	2.7:1	1.00
TH0518	0.5 - 18.5	3.5:1	1.00
TH2018	2.0 - 18.0	3.0:1	1.00
TH6018	6.0 - 18.0	3.0:1	0.75
TH8018	8.0 - 18.0	3.0:1	0.75
Octave Band Threshold Detectors			
TH0510	0.5 - 1.0	2.0:1	0.50
TH0714	0.7 - 1.4	2.0:1	0.50
TH1020	1.0 - 2.0	2.3:1	0.50
TH2040	2.0 - 4.0	2.3:1	0.50
TH2060	2.0 - 6.0	2.5:1	0.50
TH2550	2.5 - 5.0	2.5:1	0.50
TH4080	4.0 - 8.0	2.5:1	0.70
TH5010	5.0 - 10.0	2.7:1	0.80
TH6012	6.0 - 12.0	2.7:1	0.60
TH8012	8.0 - 12.0	2.7:1	0.50
TH8016	8.0 - 16.0	3.0:1	0.70
TH1218	12.0 - 18.0	3.0:1	0.50
TH1802	18.0 - 20.0	3.5:1	1.00

1. Threshold detector standard package style is "T1"  
 2. Contact the factory for custom package styles or specification to meet form, fit and function.