

# TH8018T1 Threshold Detector

8.0-18.0 GHz Broadband



## Technical Characteristics

### Product Features

|                                                                  |
|------------------------------------------------------------------|
| High reliability hermetically sealed                             |
| 10 dB dynamic range: -20 dBm to -10dBm                           |
| Propagation delay: 10 nS typical                                 |
| TTL logic output                                                 |
| Minimum pulse width: 50 nS typical                               |
| Temperature stability: 1.0 dB Typ., 3 dB above threshold setting |
| Threshold setting internally fixed or external voltage           |
| DC power (no load): $\pm 5$ VDC @ 100mA max.                     |

### Max. Ratings

|                        |                        |
|------------------------|------------------------|
| Storage Temperature:   | -65°C to +125°C        |
| Operating Temperature: | -55°C to +90°C         |
| Maximum input power:   | +25dBm Peak, +20dBm CW |

## Electrical Specifications

| Parameters          | Freq. (GHz) | Min. | Typical | Max. | Units  |
|---------------------|-------------|------|---------|------|--------|
| Frequency Range     | 8.0 to 18.0 |      |         |      | GHz    |
| Threshold Variation |             |      | 0.75    |      | +/- dB |
| VSWR                |             |      | 3.0:1   |      |        |

### NOTES:

1. Response time for input change > 3dB above CW threshold. R(load)=1M $\Omega$ , C(load)=100pF

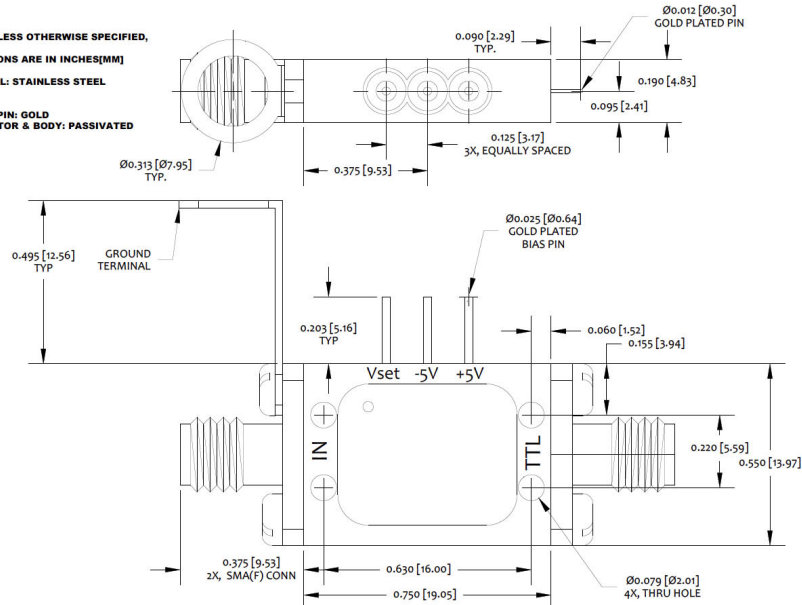
## Outline Drawing

NOTES, UNLESS OTHERWISE SPECIFIED,

1. DIMENSIONS ARE IN INCHES[MM]

2. MATERIAL: STAINLESS STEEL

3. FINISH:  
BODY & PIN: GOLD  
CONNECTOR & BODY: PASSIVATED



Product Export Classification  
ECCN: EAR 99 (unless  
otherwise specified)  
HTS: 8541.10.0060



6/26

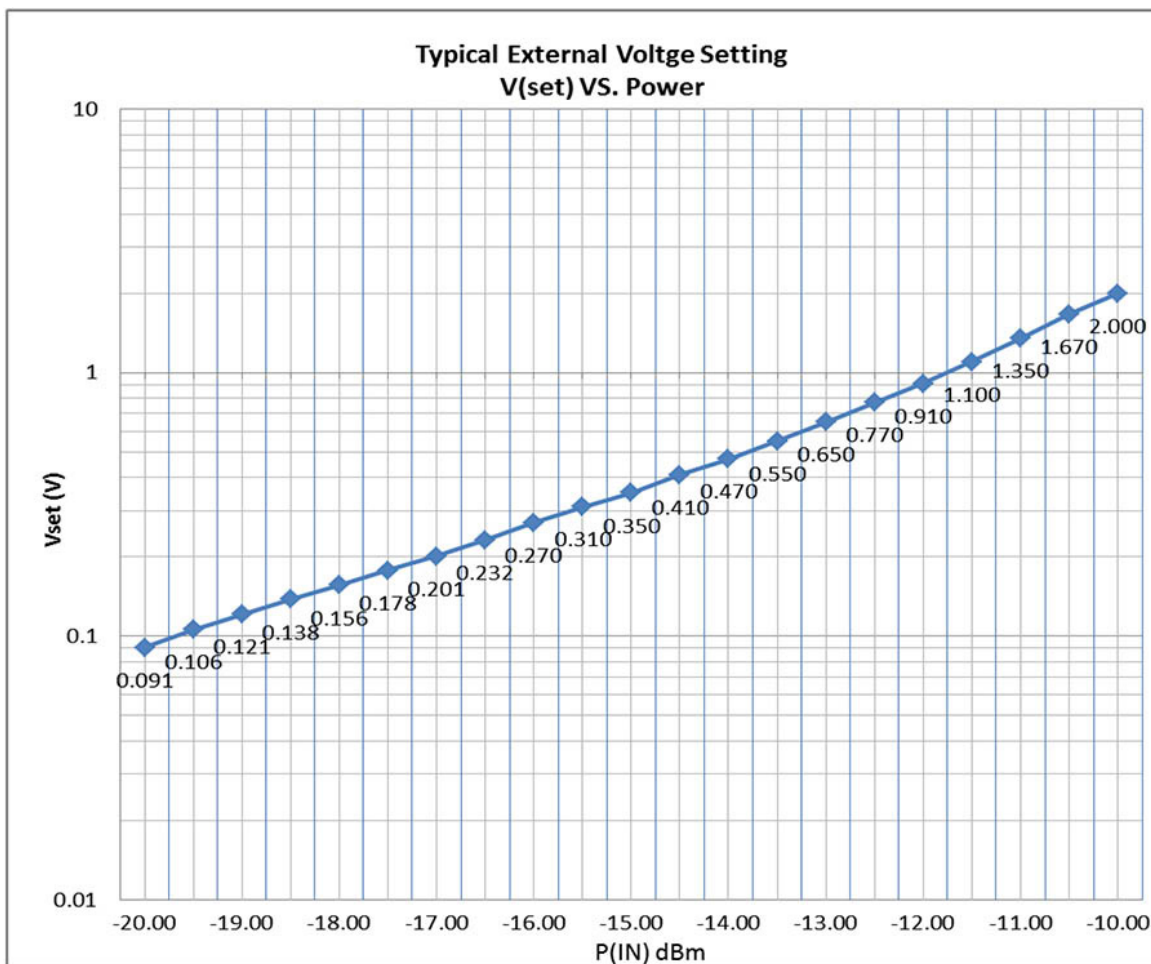


# TH8018T1 Threshold Detector

8.0-18.0 GHz Broadband



Typical Regulated Vset Curve @ +25°C



DISCLAIMER: Subject to change  
without notice. Rev(A) 01/16/20