

# 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 |

### Product Export Classification

ECCN: EAR99 (Unless otherwise specified)  
HTS: 8542330000

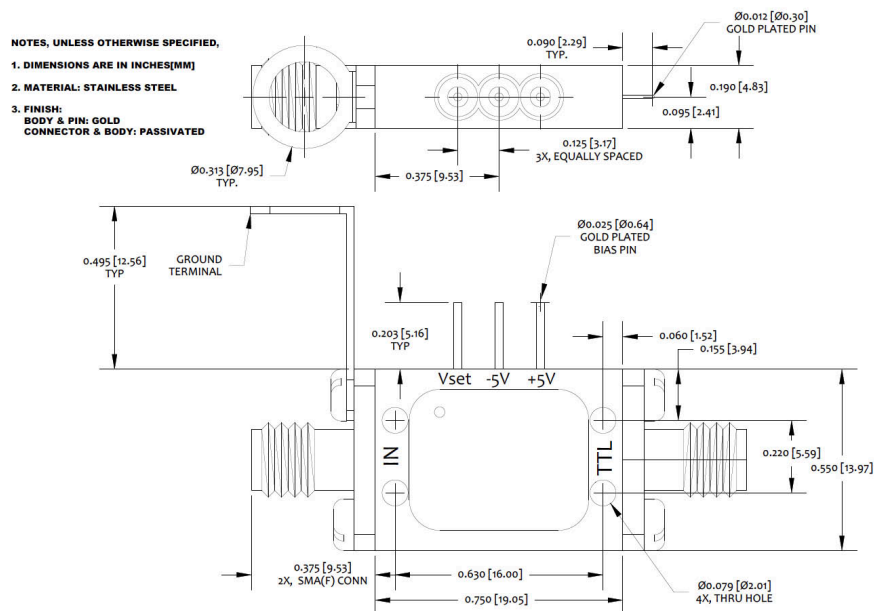
## Electrical Specifications

| 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

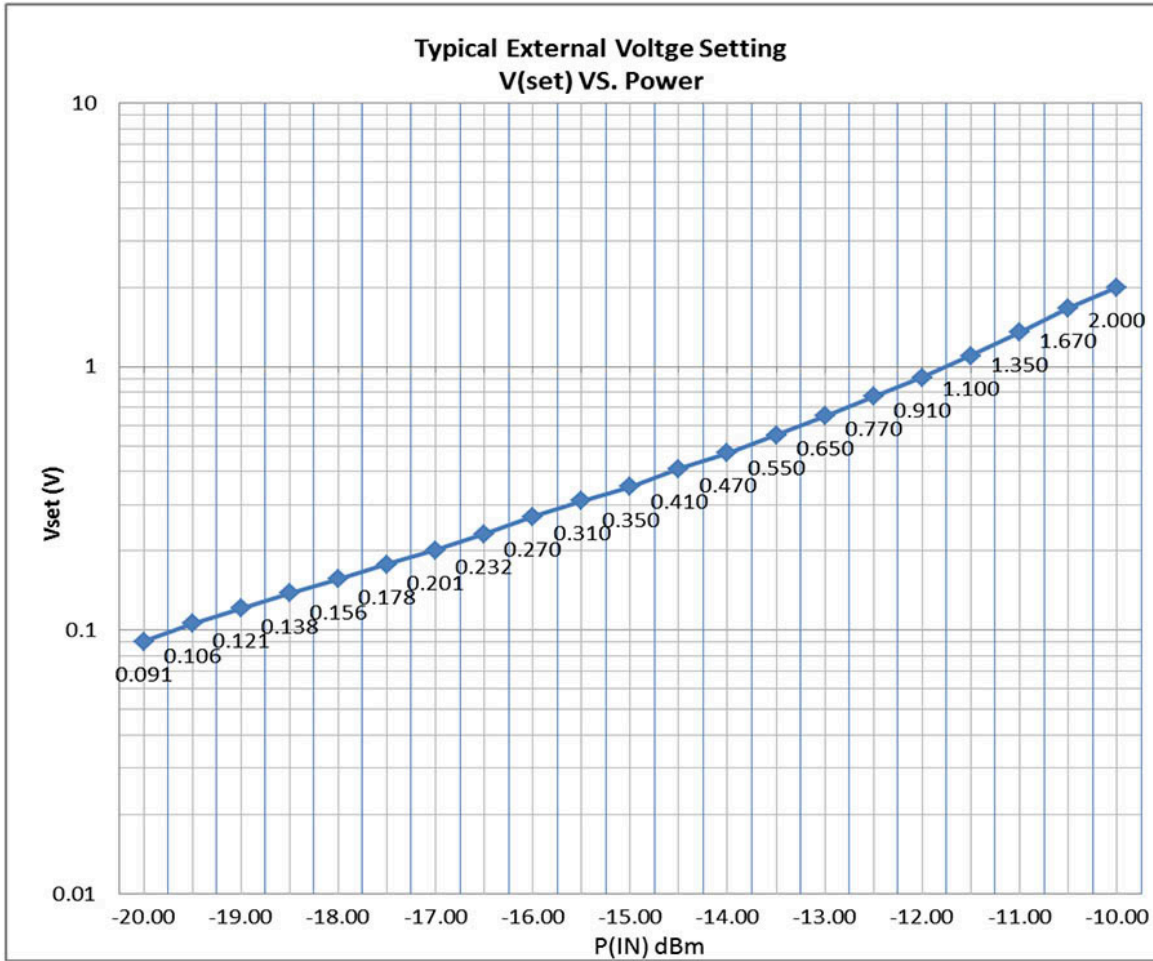


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Typical Regulated Vset Curve @ +25°C



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