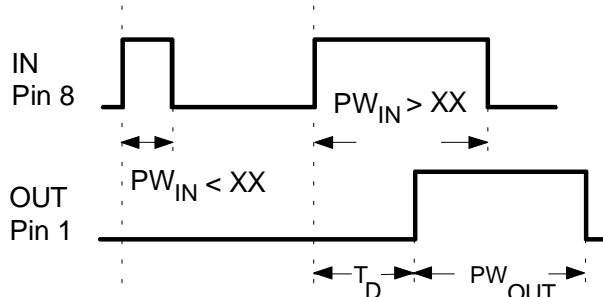


# TTLPD Series FAST / TTL Pulse Width Discriminator Modules

- 14-Pin Package Commercial and Mil-Grade Versions
- FAST/TTL Logic Buffered
- Pass Pulse Widths above & suppress Pulses below Nominal Value
- Operating Temperature Ranges 0°C to +70°C, or -55°C to +125°C



General: Input pulse widths greater than the Nominal value (XX in ns from P/N TTLPD-XX) of the module, will propagate with delay of (XX + 5ns) ± 5% or 2 ns, whichever is greater. Output pulse width will follow the input width ± 7% or 4 ns, whichever is greater. Input pulse widths less than the Nominal value will be suppressed.

## TEST CONDITIONS -- FAST / TTL

- V<sub>CC</sub> Supply Voltage ..... 5.00VDC  
 Input Pulse Voltage ..... 3.20V  
 Input Pulse Rise Time ..... 3.0 ns max.
1. Measurements made at 25°C
  2. Delay / Pulse Widths measured at 1.50V level
  3. Rise Times measured from 0.75V to 2.40V.
  4. 10pf probe and fixture load on output under test.

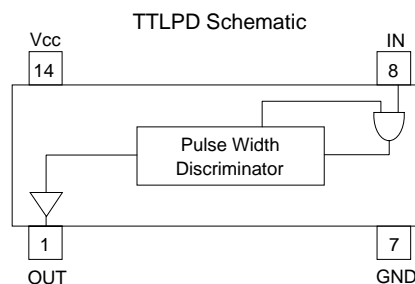
## OPERATING SPECIFICATIONS

- V<sub>CC</sub> Supply Voltage ..... 5.00 ± 0.25 VDC  
 I<sub>CC</sub> Supply Current ..... 42 mA typ., 60 mA Max.  
 Logic "1" Input: V<sub>IH</sub> ..... 2.00 V min., 5.50 V max.  
                   I<sub>IH</sub> ..... 20 µA max. @ 2.70V  
 Logic "0" Input: V<sub>IL</sub> ..... 0.80 V max.  
                   I<sub>IL</sub> ..... -0.6 mA mA  
 V<sub>OH</sub> Logic "1" Voltage Out ..... 2.40 V min.  
 V<sub>OL</sub> Logic "0" Voltage Out ..... 0.50 V max.  
 Operating Temperature Range ..... 0° to 70°C  
 Storage Temperature Range ..... -65° to +150°C

**MIL-GRADE:** These Military Grade devices use integrated circuits screened to MIL-STD-883B with an operating temperature range of -55 to +125°C. These devices have a package height of .335"

## Electrical Specifications at 25°C

| FAST / TTL Pulse Width Discriminator Modules |                       |                                   |                               |
|--|-----------------------|-----------------------------------|-------------------------------|
| Part Number                                  | Mil-Grade Part Number | Suppressed Pulse Width, Max. (ns) | Passed Pulse Width, Min. (ns) |
| TTLPD-10                                     | TTLPD-10M             | < 8.5                             | > 11.5                        |
| TTLPD-15                                     | TTLPD-15M             | < 13.5                            | > 16.5                        |
| TTLPD-20                                     | TTLPD-20M             | < 18.5                            | > 21.5                        |
| TTLPD-25                                     | TTLPD-25M             | < 23.5                            | > 26.5                        |
| TTLPD-30                                     | TTLPD-30M             | < 28.5                            | > 31.5                        |
| TTLPD-35                                     | TTLPD-35M             | < 33.0                            | > 37.0                        |
| TTLPD-40                                     | TTLPD-40M             | < 38.0                            | > 42.0                        |
| TTLPD-50                                     | TTLPD-50M             | < 47.5                            | > 52.5                        |
| TTLPD-60                                     | TTLPD-60M             | < 57.0                            | > 63.0                        |
| TTLPD-75                                     | TTLPD-75M             | < 71.0                            | > 79.0                        |
| TTLPD-80                                     | TTLPD-80M             | < 76.0                            | > 84.0                        |
| TTLPD-100                                    | TTLPD-100M            | < 95.0                            | > 105.0                       |
| TTLPD-120                                    | TTLPD-120M            | < 114.0                           | > 126.0                       |
| TTLPD-125                                    | TTLPD-125M            | < 118.7                           | > 131.3                       |
| TTLPD-150                                    | TTLPD-150M            | < 142.5                           | > 157.5                       |
| TTLPD-200                                    | TTLPD-200M            | < 190.0                           | > 210.0                       |



Dimensions in Inches (mm)

Commercial Grade 14-Pin Package with Unused Leads Removed per Schematic. (For Mil-Grade TTLPD-xxxM, Height is 0.335")

