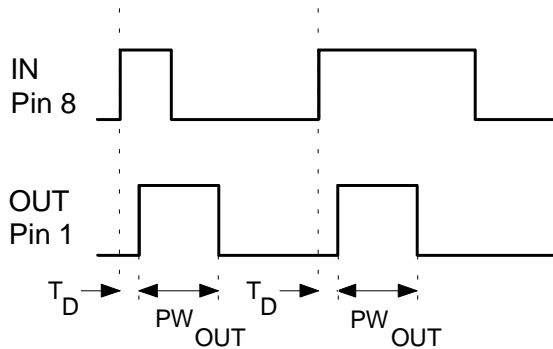


TTLPWG Series FAST / TTL Pulse Width Generator Modules

- 14-Pin Package Commercial and Mil-Grade Versions
- FAST/TTL Logic Buffered
- Precise Pulse Width Output triggered by Rising Edge of Input
- Operating Temperature Ranges 0°C to +70°C, or -55°C to +125°C



General: Triggered by the input's rising edge (input pulse width 10 ns, min.), a pulse of specified width will be generated at the output with a propagation delay of 5 ± 2 ns (7 ± 2 ns, for inverted output). High-to-low transitions will not trigger the unit. Designed for output duty-cycle less than 50%.

TEST CONDITIONS -- FAST / TTL

- V_{CC} Supply Voltage 5.00VDC
 Input Pulse Voltage 3.20V
 Input Pulse Rise Time 3.0 ns max.
 Input Pulse Width / Period 250 / 1000 ns
1. Measurements made at 25°C
 2. Delay Times measured at 1.50V level of leading edge.
 3. Rise Times measured from 0.75V to 2.40V.
 4. 10pf probe and fixture load on output under test.

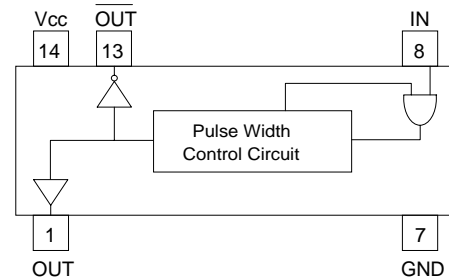
OPERATING SPECIFICATIONS

- V_{CC} Supply Voltage 5.00 ± 0.25 VDC
 I_{CC} Supply Current 35 mA typ., 55 mA Max.
 Logic "1" Input: V_{IH} 2.00 V min., 5.50 V max.
 I_{IH} 20 μ A max. @ 2.70V
 Logic "0" Input: V_{IL} 0.80 V max.
 I_{IL} -0.6 mA mA
 V_{OH} Logic "1" Voltage Out 2.40 V min.
 V_{OL} Logic "0" Voltage Out 0.50 V max.
 P_{WI} Input Pulse Width 10 ns min.
 Operating Temperature Range 0° to 70°C
 Storage Temperature Range -65° to +150°C

Electrical Specifications at 25°C

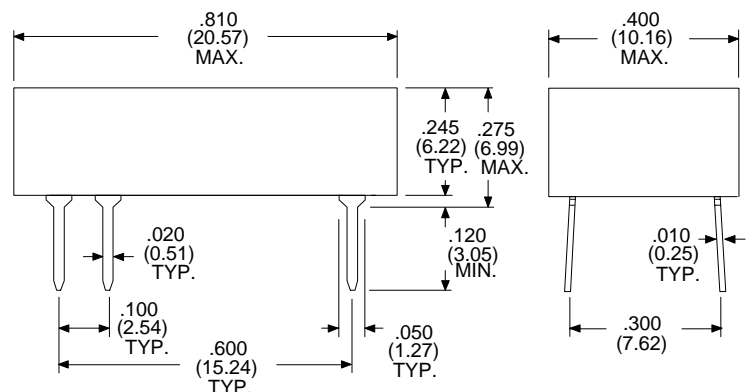
| FAST / TTL Buffered Pulse Width Generator Modules | | | |
|---|-----------------------|-------------------------|---------------------|
| Part Number | Mil-Grade Part Number | Output Pulse Width (ns) | Maximum Freq. (MHz) |
| TTLPWG-5 | TTLPWG-5M | 5 ± 1.0 | 63 |
| TTLPWG-6 | TTLPWG-6M | 6 ± 1.0 | 56 |
| TTLPWG-7 | TTLPWG-7M | 7 ± 1.0 | 53 |
| TTLPWG-8 | TTLPWG-8M | 8 ± 1.0 | 47 |
| TTLPWG-9 | TTLPWG-9M | 9 ± 1.0 | 44 |
| TTLPWG-10 | TTLPWG-10M | 10 ± 1.5 | 42 |
| TTLPWG-12 | TTLPWG-12M | 12 ± 1.5 | 35 |
| TTLPWG-15 | TTLPWG-15M | 15 ± 2.0 | 32 |
| TTLPWG-20 | TTLPWG-20M | 20 ± 2.0 | 22 |
| TTLPWG-25 | TTLPWG-25M | 25 ± 2.0 | 19 |
| TTLPWG-30 | TTLPWG-30M | 30 ± 2.0 | 15 |
| TTLPWG-35 | TTLPWG-35M | 35 ± 2.0 | 13 |
| TTLPWG-40 | TTLPWG-40M | 40 ± 2.0 | 11 |
| TTLPWG-45 | TTLPWG-45M | 45 ± 2.25 | 10 |
| TTLPWG-50 | TTLPWG-50M | 50 ± 2.5 | 9 |
| TTLPWG-60 | TTLPWG-60M | 60 ± 3.0 | 8 |
| TTLPWG-70 | TTLPWG-70M | 70 ± 3.5 | 7 |
| TTLPWG-80 | TTLPWG-80M | 80 ± 4.0 | 6 |
| TTLPWG-100 | DSP-1348M | 100 ± 5.0 | 5 |

TTLPWG Schematic



Dimensions in Inches (mm)

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



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"

Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

TTLPWG 9901



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