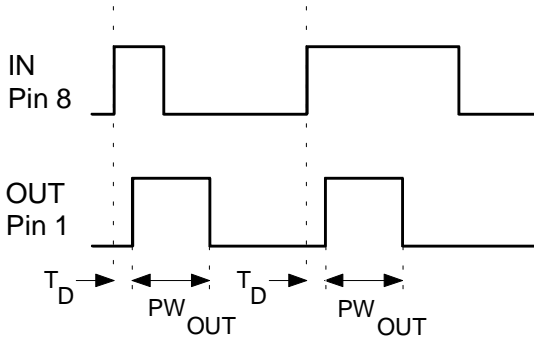


# TTLPWG Series FAST / TTL Pulse Width Generator Modules

- 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  $5 \pm 2$  ns ( $7 \pm 2$  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

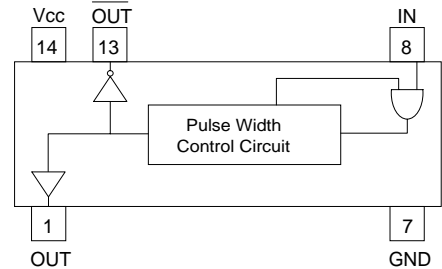
$V_{CC}$  Supply Voltage .....  $5.00 \pm 0.25$  VDC  
 $I_{CC}$  Supply Current ..... 35 mA typ., 55 mA Max.  
 Logic "1" Input:  $V_{IH}$  ..... 2.00 V min., 5.50 V max.  
 $I_{IH}$  ..... 20  $\mu$ A max. @ 2.70V  
 Logic "0" Input:  $V_{IL}$  ..... 0.80 V max.  
 $I_{IL}$  ..... -0.6 mA mA  
 $V_{OH}$  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

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

