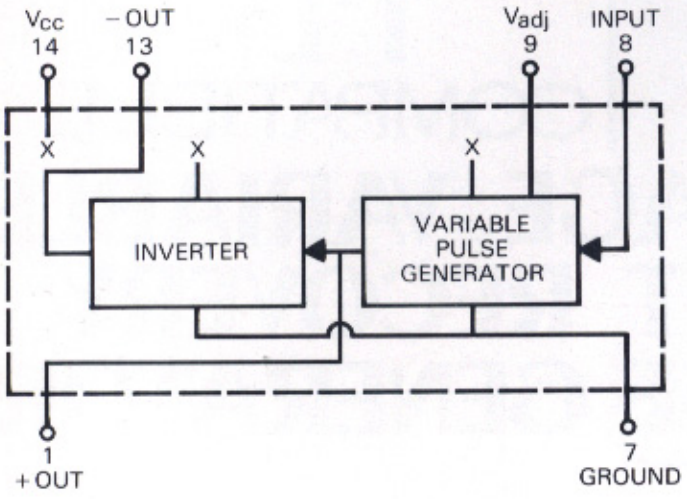
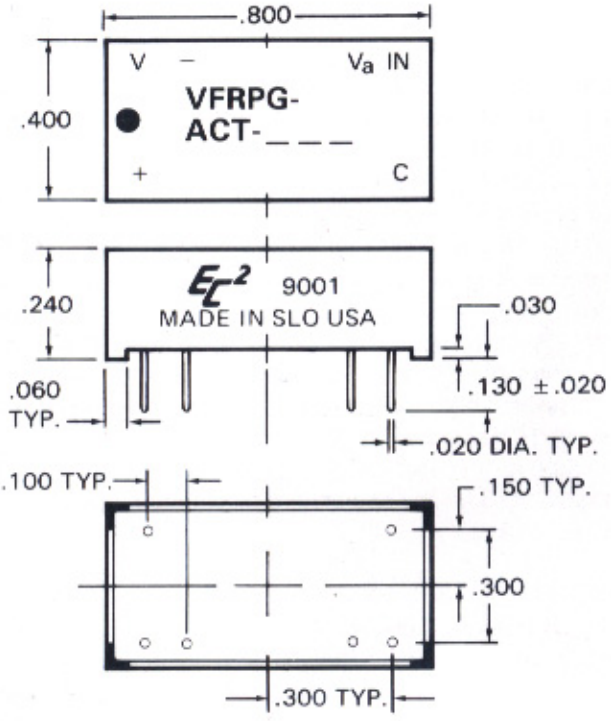
DESIGN NOTES (continued)

Marking consists of manufacturer's name, logo (EC^2), part number, terminal identification and date code of manufacture. All marking is applied by silk screen process using white epoxy paint in accordance with MIL-STD-130, to meet the permanency of identification required by MIL-STD-202, Method 215.

BLOCK DIAGRAM IS SHOWN BELOW



MECHANICAL DETAIL IS SHOWN BELOW



TEST CONDITIONS

1. All measurements are made at 25°C.
2. V_{cc} supply voltage is maintained at 5.0V DC.
3. All units are tested using an ACT toggle-type positive input pulse and one ACT load at the output.
4. Input pulse width used is 10ns for all modules; repetition rate is approximately 200 Khz.

OPERATING SPECIFICATIONS

*V_{cc} supply voltage: . . . . . 4.75 to 5.25V DC

V_{cc} supply current:

Constant "1" or "0" in . . . . . 2ma typical

Constant 1Mhz in . . . . . 4ma typical

Logic 1 Voltage in: . . . . . 2V min.; V_{cc} max.

Logic 0 Voltage in: . . . . . .8V max.

Logic 1 Voltage out: . . . . . 4.3V min. @ –24ma.

Logic 0 Voltage out: . . . . . 0.44V max. @ +24ma.

Operating temperature range: . . . . . –40 to +85°C.

Storage temperature: . . . . . –55 to +125°C.

*Pulse width increases or decreases approximately 1% for a respective increase or decrease of 5% in supply voltage.

PART NUMBER TABLE

Part Number	Pulse Width (in ns) V_{adj} @ 4V	Pulse Width Adjustability (nominal 4V)	Maximum Rep. Rate (in Mhz)
VFRPG-ACT-10	10 ±0.5	± 1.0ns	48.1
VFRPG-ACT-11	11 ±0.5	± 1.0ns	45.7
VFRPG-ACT-12	12 ±0.5	± 1.0ns	43.5
VFRPG-ACT-13	13 ±0.5	± 1.0ns	41.5
VFRPG-ACT-14	14 ±0.5	± 1.0ns	39.6
VFRPG-ACT-15	15 ±0.5	± 1.0ns	37.9
VFRPG-ACT-16	16 ±0.5	± 1.0ns	36.3
VFRPG-ACT-17	17 ±0.5	± 1.0ns	34.9
VFRPG-ACT-18	18 ±0.5	± 1.0ns	33.6
VFRPG-ACT-19	19 ±0.5	± 1.0ns	32.3
VFRPG-ACT-20	20 ±0.5	± 1.0ns	31.1
VFRPG-ACT-21	21 ±0.5	± 1.0ns	30.1
VFRPG-ACT-22	22 ±0.5	± 1.1ns	29.0
VFRPG-ACT-23	23 ±0.5	± 1.1ns	28.1
VFRPG-ACT-24	24 ±0.5	± 1.1ns	27.2
VFRPG-ACT-25	25 ±0.5	± 1.2ns	26.4
VFRPG-ACT-30	30 ±0.6	± 1.3ns	22.8
VFRPG-ACT-35	35 ±0.7	± 1.5ns	20.0
VFRPG-ACT-40	40 ±0.8	± 1.7ns	17.8
VFRPG-ACT-45	45 ±0.9	± 1.9ns	16.1
VFRPG-ACT-50	50 ±1.0	± 2.0ns	14.6
VFRPG-ACT-60	60 ±1.2	± 2.4ns	12.3
VFRPG-ACT-70	70 ±1.3	± 2.7ns	10.6
VFRPG-ACT-75	75 ±1.4	± 2.9ns	9.9
VFRPG-ACT-80	80 ±1.5	± 3.0ns	9.3
VFRPG-ACT-90	90 ±1.6	± 3.3ns	8.3
VFRPG-ACT-100	100 ±1.8	± 3.6ns	7.5
VFRPG-ACT-150	150 ±2.5	± 5.2ns	4.9
VFRPG-ACT-200	200 ±3.5	± 6.6ns	3.6
VFRPG-ACT-250	250 ±4.0	± 8.0ns	2.9
VFRPG-ACT-300	300 ±4.5	± 9.3ns	2.4
VFRPG-ACT-400	400 ±6.0	±11.9ns	1.7
VFRPG-ACT-500	500 ±7.0	±14.5ns	1.4

Pulse widths are trimmable by adjusting V_a between 3 and 5V DC. All modules can be operated up to the maximum pulse rate specified in the Part Number Table with pulse widths as low as 10ns and pulse spacing as low as 10ns. Since pulse width accuracies may be somewhat degraded at high pulse rates, it is suggested that the module be evaluated under the specific operating conditions. Special modules can be readily manufactured to improve accuracies and/or provide customer specified random pulse widths for specific applications.