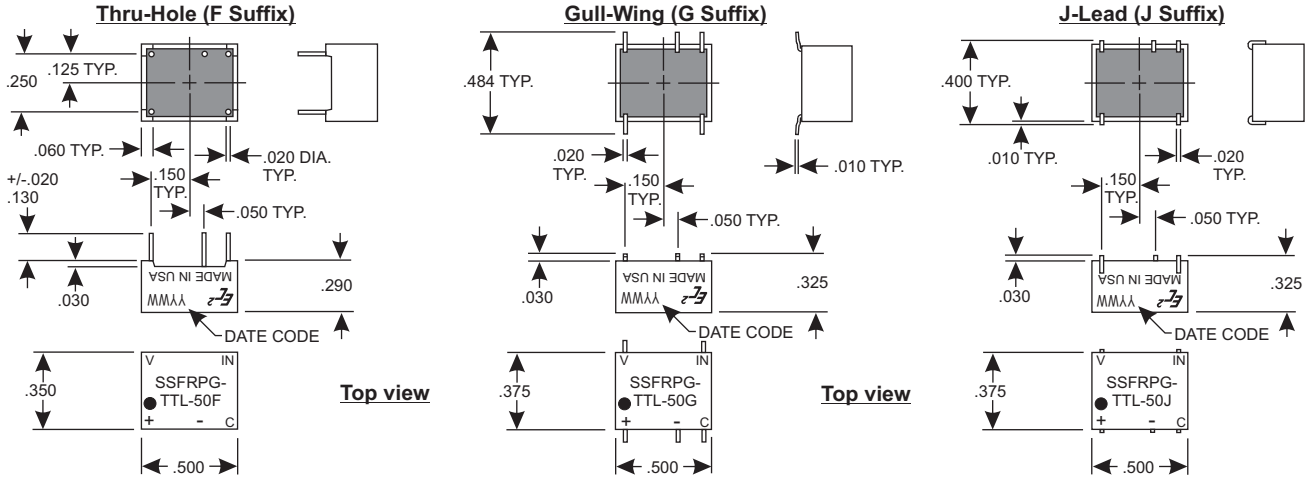
Space Saver FAST TTL Fast Recovery Pulse Generator

The Space Saver FAST TTL Fast Recovery Pulse Generators manufactured by Engineered Components Company are designed to provide a precise output pulse width when triggered by variable pulse width inputs. These pulse generators provide a stable positive (+), as well as negative(-), output pulse of the specified width for each rising edge of the input pulse. The input pulse must be low for a minimum of 10 ns before rising to a high for a minimum of 10ns. No output pulse occurs for each falling edge of the input pulse. Maximum input pulse repetition rates are shown in the table below.

The MTBF on these modules, when calculated per MIL-HDBK-217, for a 50 deg.C ground fixed environment and with 50VDC applied, is in excess of 3 million hours. The temperature coefficient of delay is less than +/-100 ppm/deg.C over the operating temperature range of 0 to +70 deg. C.

The module is provided in a 8-pin Space Saver package, fully encapsulated in epoxy resin and is housed in a Diallyl Phthalate case, blue in color. The case marking is applied by silkscreen using white epoxy paint. The 5 copper leads are tin-lead plated and meet the solderability requirements of MIL-STD-202, Method 208.

MECHANICAL DIAGRAM



Product Selection Table
(Add F Suffix for Thru-Hole Leads, G Suffix for Gull-Wing Leads, or J Suffix for J-Leads)

Part Number	Pulse Width (in ns)	Maximum Repetition Rate (in MHz)
SSFRPG-TTL-10	10+/-1.0	60.0
SSFRPG-TTL-11	11+/-1.0	56.0
SSFRPG-TTL-12	12+/-1.0	53.0
SSFRPG-TTL-13	13+/-1.0	51.0
SSFRPG-TTL-14	14+/-1.0	48.0
SSFRPG-TTL-15	15+/-1.0	46.0
SSFRPG-TTL-16	16+/-1.0	44.0
SSFRPG-TTL-17	17+/-1.0	42.0
SSFRPG-TTL-18	18+/-1.0	40.0
SSFRPG-TTL-19	19+/-1.0	38.0
SSFRPG-TTL-20	20+/-1.0	37.0
SSFRPG-TTL-21	21+/-1.0	35.0
SSFRPG-TTL-22	22+/-1.0	34.0
SSFRPG-TTL-23	23+/-1.0	33.0
SSFRPG-TTL-24	24+/-1.0	32.0
SSFRPG-TTL-25	25+/-1.0	31.0
SSFRPG-TTL-30	30+/-1.0	26.0
SSFRPG-TTL-35	35+/-1.5	23.0
SSFRPG-TTL-40	40+/-1.5	20.0
SSFRPG-TTL-45	45+/-1.5	18.0
SSFRPG-TTL-50	50+/-1.5	17.0
SSFRPG-TTL-60	60+/-2.5	14.5
SSFRPG-TTL-70	70+/-2.0	12.5
SSFRPG-TTL-75	75+/-2.0	11.5
SSFRPG-TTL-80	80+/-2.0	11.0
SSFRPG-TTL-90	90+/-3.0	9.5
SSFRPG-TTL-100	100+/-3.0	8.5
SSFRPG-TTL-150	150+/-4.0	6.0
SSFRPG-TTL-200	200+/-6.0	4.5
SSFRPG-TTL-250	250+/-7.0	3.5
SSFRPG-TTL-300	300+/-9.0	3.0
SSFRPG-TTL-400	400+/-10.0	2.2
SSFRPG-TTL-500	500+/-10.0	1.8

Special modules can often be manufactured to provide for customer specific applications.

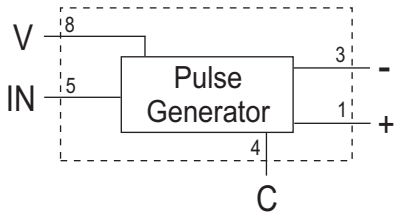
Operating Specifications:

All measurements made at 25 deg. C
All measurements made with Vcc = +5VDC
All measurements made with (1) FAST TTL output load

Operating Temperature: 0 to +70 deg. C
Storage Temperature: -55 to +125 deg. C

Vcc Supply Voltage: 4.75 to 5.25VDC
Vcc Supply Current: 40mA typical
Logic "High" Input:
Voltage: 2.0VDC min. ; Vcc max.
Current: 2.7VDC = 20uA max. ; 5.5VDC = 1mA max.
Logic "Low" Input:
Voltage: 0.8 VDC max.
Current: -0.6mA max.
Logic "High" Voltage Out: 2.7VDC min.
Logic "Low" Voltage Out: 0.5VDC max.

BLOCK DIAGRAM



engineered components company
A Division of Cornucopia Tool & Plastics, Inc. PO Box 1915, 448 Sherwood Rd., Paso Robles CA 93447
Phone: 805-369-0034
Fax: 805-369-0033
Web: www.ec2.com