

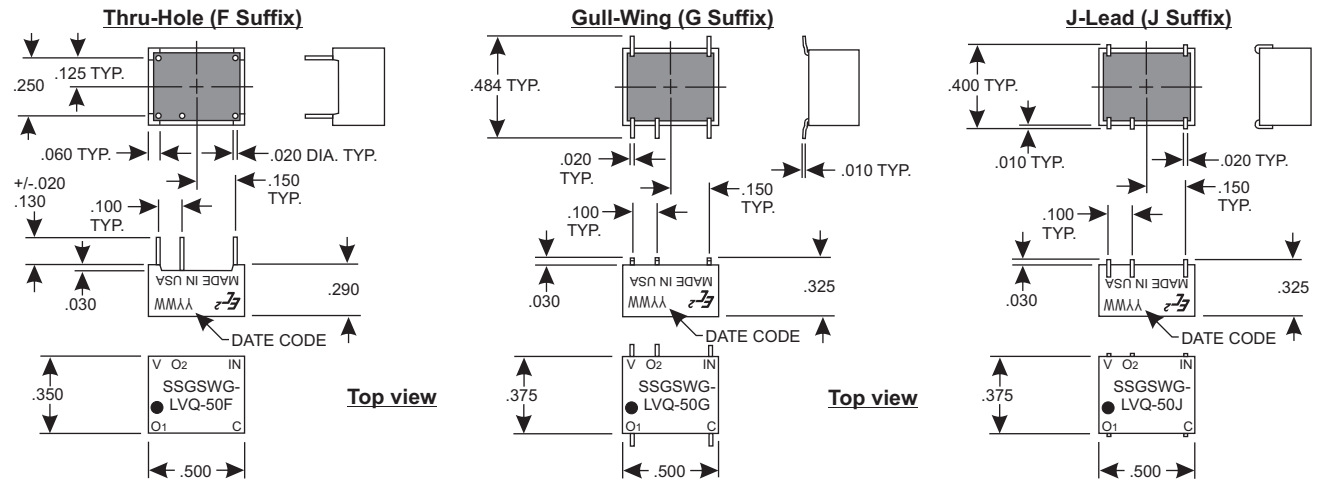
Space Saver LVQ 3V Gated Square Wave Generator

The Space Saver LVQ 3V Gated Square Wave Generators manufactured by Engineered Components Company are designed to provide a square wave output at a given frequency. These generators are both keyable and synchronizable, producing a continuous output train as long as a TTL "low" is applied to the input. With a TTL "high" applied to the input, output 1 will produce a constant "high" and output 2 will produce a constant "low". When the input switches to "low", output 2 goes "high" immediately. Output 1 and output 2 both go low after one half-cycle and then run in phase as a continuous square wave output. When the input switches back to "high", output 2 goes "low" immediately and output 1 goes "high" one half-cycle later.

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 4 million hours. The temperature coefficient of delay is less than 600 ppm/deg.C over the operating temperature range of -40 to +85 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	Nominal Output Frequency	Output Frequency Tolerance
SSGSWG-LVQ-2	2.0 MHz	+/-2%
SSGSWG-LVQ-2.5	2.5 MHz	+/-2%
SSGSWG-LVQ-3	3.0 MHz	+/-2%
SSGSWG-LVQ-3.5	3.5 MHz	+/-2%
SSGSWG-LVQ-4	4.0 MHz	+/-2%
SSGSWG-LVQ-4.5	4.5 MHz	+/-2%
SSGSWG-LVQ-5	5.0 MHz	+/-2%
SSGSWG-LVQ-5.5	5.5 MHz	+/-2%
SSGSWG-LVQ-6	6.0 MHz	+/-2%
SSGSWG-LVQ-7	7.0 MHz	+/-2%
SSGSWG-LVQ-8	8.0 MHz	+/-2%
SSGSWG-LVQ-9	9.0 MHz	+/-2%
SSGSWG-LVQ-10	10.0 MHz	+/-2%
SSGSWG-LVQ-11	11.0 MHz	+/-2%
SSGSWG-LVQ-12	12.0 MHz	+/-2%
SSGSWG-LVQ-13	13.0 MHz	+/-2%
SSGSWG-LVQ-14	14.0 MHz	+/-2%
SSGSWG-LVQ-15	15.0 MHz	+/-2%
SSGSWG-LVQ-20	20.0 MHz	+/-2%
SSGSWG-LVQ-25	25.0 MHz	+/-2%
SSGSWG-LVQ-30	30.0 MHz	+/-2%
SSGSWG-LVQ-35	35.0 MHz	+/-2%
SSGSWG-LVQ-40	40.0 MHz	+/-2%
SSGSWG-LVQ-45	45.0 MHz	+/-2%
SSGSWG-LVQ-50	50.0 MHz	+/-2%
SSGSWG-LVQ-60	60.0 MHz	+/-2%
SSGSWG-LVQ-70	70.0 MHz	+/-2%
SSGSWG-LVQ-80	80.0 MHz	+/-2%

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 $V_{CC} = +3.3VDC$
 All measurements made with (1) LVQ output load

Operating Temperature: -40 to +85 deg. C
 Storage Temperature: -55 to +125 deg. C

V_{CC} Supply Voltage: 2.70 to 3.60VDC

V_{CC} Supply Current:

SSGSWG-LVQ-2X = 4mA typical

SSGSWG-LVQ-80X = 20mA typical

Logic "High" Input:

Voltage: 2.0VDC min.; V_{CC} max.

Current: V_{CC} max.; +/-1uA max.

Logic "Low" Input:

Voltage: 0.8 VDC max.

Current: +/-1uA max.

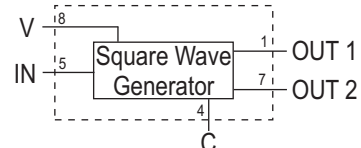
Logic "High" Voltage Out: 2.2VDC min.

Current Out: -12mA

Logic "Low" Voltage Out: 0.4VDC max.

Current Out: +12mA

BLOCK DIAGRAM



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