



Model 2629 - Low Cost SP6T Switch

Contact us

Application Notes for [RF Switch](#)

MODEL 2629

Model 2629 is a Low Cost high-performance terminated SP6T switch that operates over the full instantaneous bandwidth of 1 to 18 GHz with ON and OFF times of 500 nsec.

The Model 2629 is equipped with an integrated driver that is powered by +5 and -12 volt supplies. The proper currents required to switch the ports ON or OFF are provided by the driver, which is controlled by external logic signals.

- Frequency range: 1 to 18 GHz
- Isolation: up to 55 dB
- All in-line outputs
- Phase and amplitude matched
- Non-reflective



PERFORMANCE CHARACTERISTICS

CHARACTERISTIC	
FREQUENCY RANGE (GHz)	1-18
MIN. ISOLATION (dB)	55
MAX. INSERTION LOSS (dB)	4.8
MAX. VSWR (ON/OFF)	2.2
PHASE MATCHING BETWEEN PORTS (deg, max)	± 10
AMPLITUDE MATCHING BETWEEN PORTS (dB, max)	± 0.6
HARMONICS @ +25 dBm (dBc, max)	-35

Switching Time

ON time 500 nsec max.
 OFF time 500 nsec max.

Power Handling Capability

Without Performance
 Degradation OFF port 100 mW cw or peak
 ON port 1W average
 Survival OFF port 10W peak
 Power ON port 75W peak (1 µsec max. pulse width)

Power Supply Requirements

Units With Integrated Drivers

+5V ±5%, 250 mA max
 -12V ±5%, 100 mA max

Control Characteristics

Control Input

ENVIRONMENTAL RATINGS

Operating Temperature

Range -65°C to +110°C

Non-Operating

Temperature Range -65°C to +125°C

Humidity MIL-STD-202F, Method 103B, Cond. B (96 hrs. at 95%)

Shock MIL-STD-202F, Method 213B, Cond. B (75G, 6 msec)

Vibration MIL-STD-202F, Method 204D, Cond. B (.06" double amplitude or 15G, whichever is less)

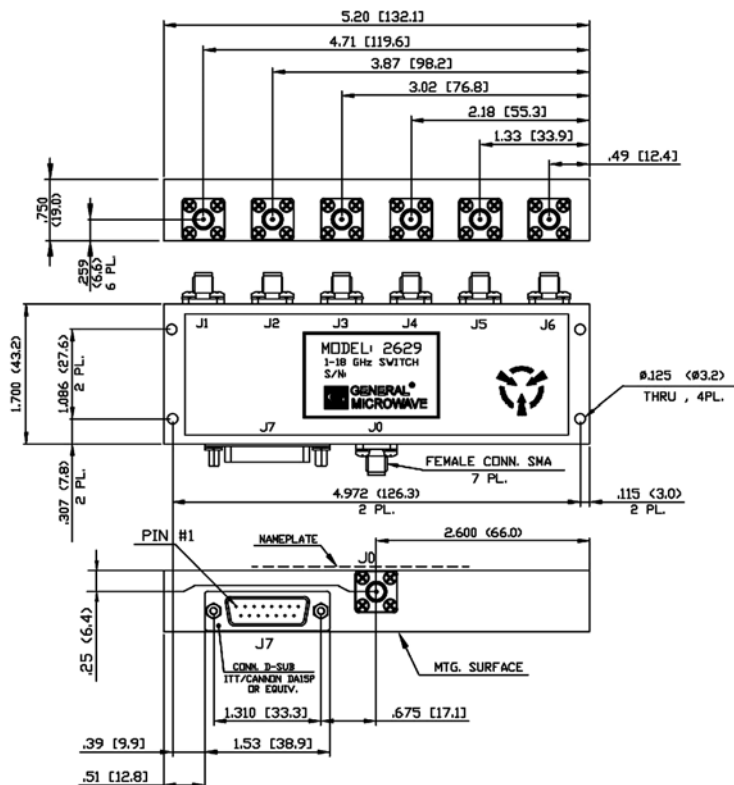
Altitude MIL-STD-202F, Method 105C, Cond. B (50,000 ft.)

Temp. Cycling MIL-STD-202F, Method 107D, Cond. A, 5 cycles

Impedance Schottky TTL, two unit loads. (A unit load is 2 mA sink current and 50 μ A source current.)

Control Logic Logic "0" (-0.3 to +0.8V) for Port "ON" Logic "1" (+2.0 to +5.0V) for Port "OFF".

DIMENSIONS AND WEIGHTS



PIN OUT	
PIN	FUNCTION
1	+5V
2	N/C
3	J2 CONTROL
4	N/C
5	J4 CONTROL
6	N/C
7	J6 CONTROL
8	-12V
9	J1 CONTROL
10	N/C
11	J3 CONTROL
12	N/C
13	J5 CONTROL
14	N/C
15	GND

WEIGHT (APPROX): 300 grams, 10.5 oz. a

Dimensional Tolerances, unless otherwise indicated: .XX \pm .02; .XXX \pm .005



Herley - General Microwave specializes in developing and producing customized [microwave components](#) and [millimeter wave products](#) for the defense and aerospace industries as well as for non-defense applications such as communication systems. Herley General Microwave produces the industry standard General Microwave line of off-the-shelf catalog RF components. If you are looking for a [solid state power amplifier](#), [microwave synthesizer](#) or other [microwave oscillators](#), microwave receiver, [microwave switches](#), [microwave attenuator](#), microwave limiter, [microwave phase shifter](#), or [microwave IQ vector modulator](#); we can produce components meeting your requirements at a very competitive price. We also produce high quality customized [integrated microwave assemblies](#) such as up and down converters, DLVAs, beam forming networks, front ends, or switched bank filters, that can be used in a wide variety of demanding applications. [Herley General Microwave \(HGMI\)](#), a subsidiary of [Herley Industries](#) provides solutions for electronic warfare systems, phased array radar systems, electronic warfare simulators, test equipment and test systems and other defense and non-defense systems. We look forward to working with you, so please [contact us](#) today.