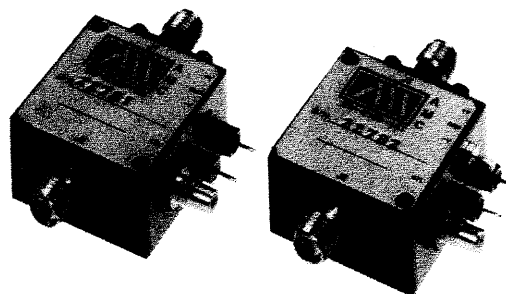


**SPST SWITCH
0.3 - 18 GHz
NON—REFLECTIVE
WITH INTEGRAL DRIVER
SW-2183-1AT**



FEATURES

- 0.3 to 18 GHz Frequency Band
- 70 dB, Minimum On/Off Isolation
- 10 ns, Maximum Rise/Fall Time
- Small Size
- Light Weight
- Integral TTL Driver

DESCRIPTION

The SW-2183-1AT is a broadband, high speed, low loss SPST unit with off arm terminations and integral TTL compatible driver. It is powered by +5V and -12 volt supplies. It features rugged integrated circuit assemblies of chip pin diodes on a microstrip transmission line and TTL driver that is electrically as well as mechanically integral for smooth pulse modulation with no overshoot or ringing.

APPLICATIONS

- Radar Simulators
- Radar Cross Section Transmitters
- Pulse Modulators

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SPECIFICATIONS

CHARACTERISTIC					
	0.2 to 0.5	0.5 to 2.0	2.0 to 8.0	8.0 to 12.4	12.4 to 18.0
MIN. ISOLATION (dB)	70	80	80	80	70
MAX. INSERTION LOSS (dB)	2.0	2.0	2.5	3.0	3.5
VSWR (On and Off)	1.5	1.5	1.75	2.0	2.0

SWITCHING SPEED

RISE TIME (10 - 90% RF)	10 ns Max.
FALL TIME (90 - 10% RF)	10 ns Max.
ON TIME (50% COMMAND TO 90% RF)	30 ns Max.
OFF TIME (50% COMMAND TO 10% RF)	30 ns Max.

AVAILABLE OPTIONS

Option No.	Description
001	(2) SMA Male RF Connectors
002	(1) Male, (1) Female SMA RF Connector each
003	Solder Type Control Terminal
005	50 ohm Control Impedance
103	Integral Video Filters (2-18 GHz Frequency Band)

POWER HANDLING CAPABILITY

NO DEGRADATION
500 MW CW or PEAK
SURVIVAL POWER
1 W AVERAGE, 10 W PEAK
(1μ SEC MAX PULSE WIDTH)

ENVIRONMENTAL RATINGS

OPERATING TEMPERATURE - 65° C to 110° C
NON-OPERATING TEMPERATURE - 65° C to 125° C
HUMIDITY MIL-STD-202F, METHOD 103B
SHOCK MIL-STD-202F, METHOD 213B
VIBRATION MIL-STD-202F, METHOD 204D
ALTITUDE MIL-STD-202F, METHOD 105C
TEMP CYCLING MIL-STD-202F, METHOD 107D

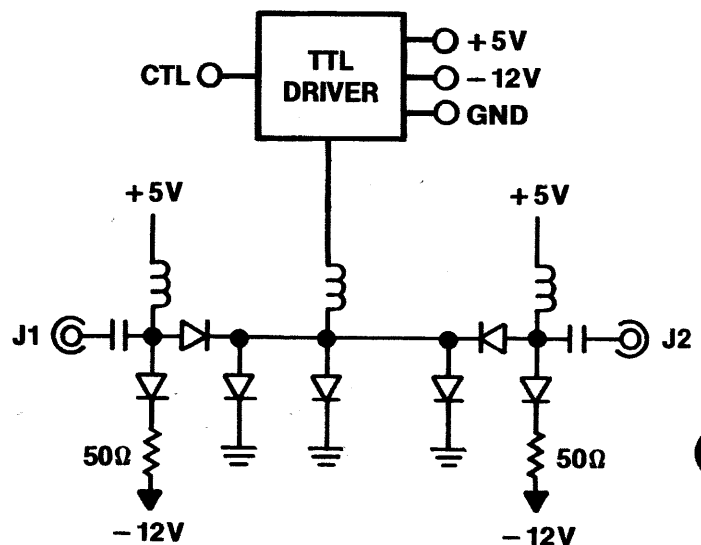
POWER REQUIREMENTS

+5V ± 2%, 90 mA
-12V ± 5%, 75 mA

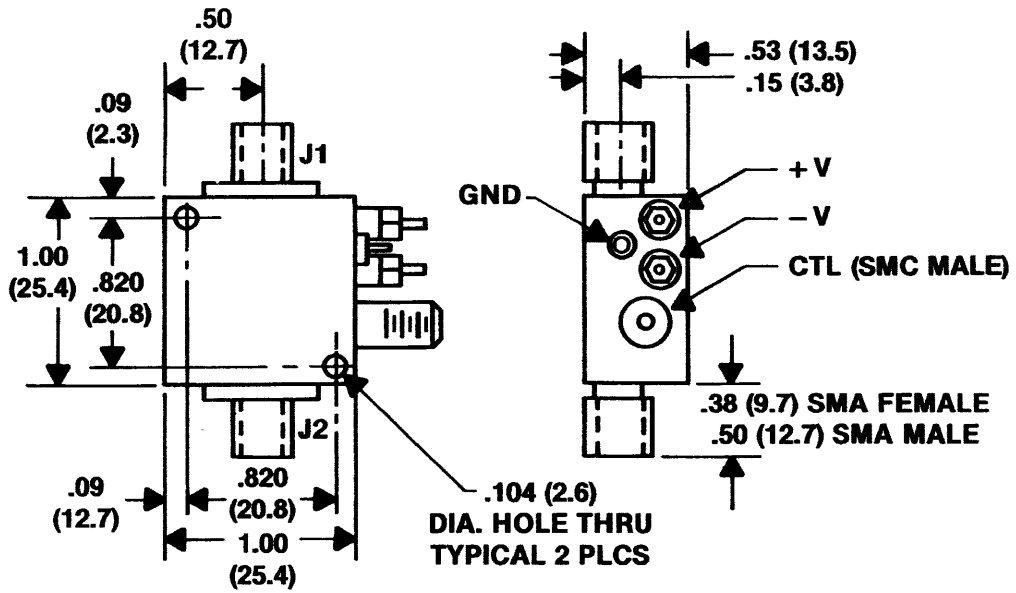
CONTROL CHARACTERISTICS

CTL INPUT - 1 UNIT LOAD
LOGIC SENSE
0 SWITCH "ON"
1 SWITCH "OFF"

FUNCTIONAL SCHEMATIC



MECHANICAL DATA



TRUTH TABLE

<u>LOGIC</u>	<u>RF</u>
0	ON
1	OFF

DIMENSIONS: INCHES (MILLIMETERS)