

PIN DIODE SWITCHES – SP1T

G.T. Microwave Features:

Frequency Ranges: From 100 MHz to 20 GHz any optimized bandwidth is available.

TTL Compatible Logic: Logic '0' = Isolation and Logic '1' = Insertion Loss. For switches without TTL driver; +1VDC @ +50mA = Isolation and -1VDC @ -50mA = Insertion Loss. For logic options, please consult factory.

High Speed Switching: Switches listed are measured from 50% TTL to 10%/90% RF.

Low DC Power Consumption: Switches with TTL drivers require ?5VDC @ ?50mA.

High RF Power Handling: For power levels greater than listed, please consult factory.

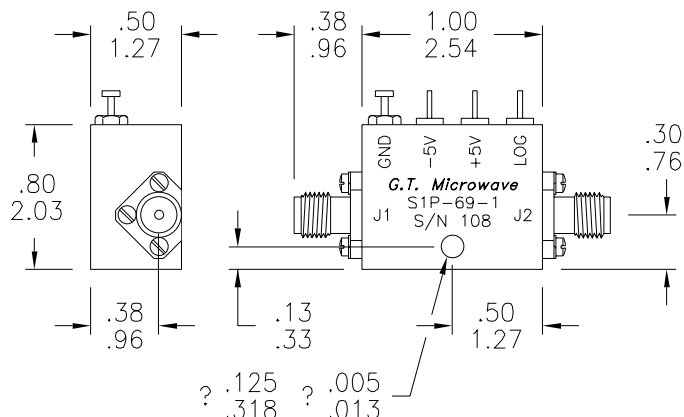
Absorptive Switches: On these models the J1 port is NON-REFLECTIVE.

Standard Interfaces: RF port connectors are 'SMA', female per MIL-C-39012. DC/LOGIC connections are solder terminals. Call factory for optional connectors.

Matched Phase & Amplitude: Models listed can be matched unit to unit. Please consult factory.

Life Time Integrity: G.T.M.I.'s switches are designed to meet MIL-E-16400, Range 1 and MIL-E-5400, Class 2 environments operating within the -55? to +85?C temperature range. MIL-STD-883 screening, -90 dBc RFI/EMI shielding, video filtering and 10⁻⁶cc/SEC hermeticity are available. Page 8 has Environmental Ratings.

Actual Size Shown



SP1T Switch Outline Drawing

DIMENSIONS ARE EXPRESSED $\frac{\text{IN}}{\text{CM}}$ TOLERANCES ? .02 ? .010
? .05 ? .025

Microwave Products Available

Switches BP/QPSK & Vector Modulators Couplers
Attenuators Gain Equalizers D.C. Blocks
Hybrids Power Dividers/Combiners Bias Tees
Phase Shifters Custom Sub-Assemblies Detectors
Passive, Linearized Voltage or Current Controlled Analog,
Digital, Programmable and Temperature Compensated

Electrical Specifications for REFLECTIVE and ABSORPTIVE switches – SP1T

FREQ. RANGE GHz	ISOLATION dB	INSERTION LOSS dB & SWITCHING SPEED REFL ABSP uSEC			INSERTION LOSS dB & SWITCHING SPEED REFL ABSP nSEC			INSERTION LOSS dB & SWITCHING SPEED REFL ABSP nSEC			V.S.W.R. MAX	INPUT POWER WATTS TYP MAX	
0.5-2.0	30	0.4	0.8	1.0	0.6	1.0	100	0.7	1.1	30	1.4:1	0.1	1.0
	60	0.6	1.0		0.8	1.2		0.9	1.3				
	80	0.7	1.1		0.9	1.3		1.0	1.4				
2.0-8.0	30	0.8	1.2	1.0	1.0	1.4	100	1.1	1.5	30	1.6:1	0.2	1.0
	60	0.9	1.3		1.1	1.5		1.2	1.6				
	80	1.0	1.4		1.2	1.6		1.3	1.7				
6.0-18.0	30	1.6	2.0	1.0	1.8	2.2	100	1.9	2.3	30	2.0:1	0.2	1.0
	60	1.8	2.2		2.0	2.4		2.1	2.5				
	80	2.0	2.4		2.2	2.6		2.3	2.7				
2.0-18.0	30	1.7	2.1	1.0	1.9	2.3	100	2.0	2.4	30	2.0:1	0.2	1.0
	60	1.9	2.3		2.1	2.5		2.2	2.6				
	80	2.1	2.5		2.3	2.7		2.4	2.8				

For substantial improvement in performance; ask for OPTIMIZED NARROWBAND models