

PIN DIODE SWITCHES – SP2T

G.T. Microwave Features:

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

TTL Compatible Logic: Logic '1' = Low Loss J1-J3 and Logic '0' = Low Loss J1-J2. 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.

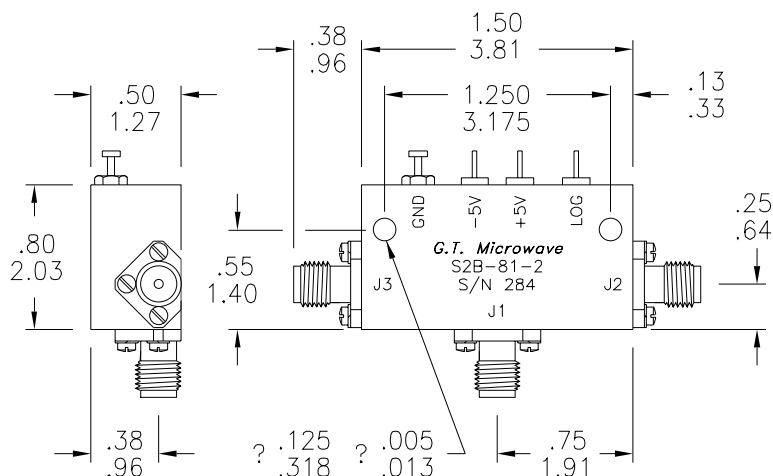
Absorptive Switches: On these models the J2 & J3 ports are NON-REFLECTIVE.

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 are available with matched ports. 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



SP2T Switch Outline Drawing

DIMENSIONS ARE EXPRESSED IN 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 – SP2T

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	0.45	0.85	1.0	0.65	1.05	100	0.75	1.15	30	1.4:1	0.1	1.0
	60	0.65	1.05		0.85	1.25		0.95	1.35				
	80	0.75	1.15		0.95	1.35		1.05	1.45				
2.0-8.0	30	0.85	1.25	1.0	1.05	1.45	100	1.15	1.55	30	1.6:1	0.2	1.0
	60	1.0	1.4		1.2	1.6		1.3	1.7				
	80	1.1	1.5		1.3	1.7		1.4	1.8				
6.0-18.0	30	1.8	2.2	1.0	2.0	2.4	100	2.1	2.5	30	1.8:1	0.2	1.0
	60	2.0	2.4		2.2	2.6		2.3	2.7				
	80	2.2	2.6		2.4	2.8		2.5	2.9		2.0:1		
2.0-18.0	30	1.9	2.3	1.0	2.1	2.5	100	2.2	2.6	30	2.0:1	0.2	1.0
	60	2.1	2.5		2.3	2.7		2.4	2.8				
	80	2.3	2.7		2.5	2.9		2.6	3.0				

For substantial improvement in performance; ask for OPTIMIZED NARROWBAND models