

PIN DIODE SWITCHES – SP4T

G.T. Microwave Features:

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

TTL Compatible Logic: Logic '1' = Isolation and Logic '0' = 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 @ +150/-65mA.

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

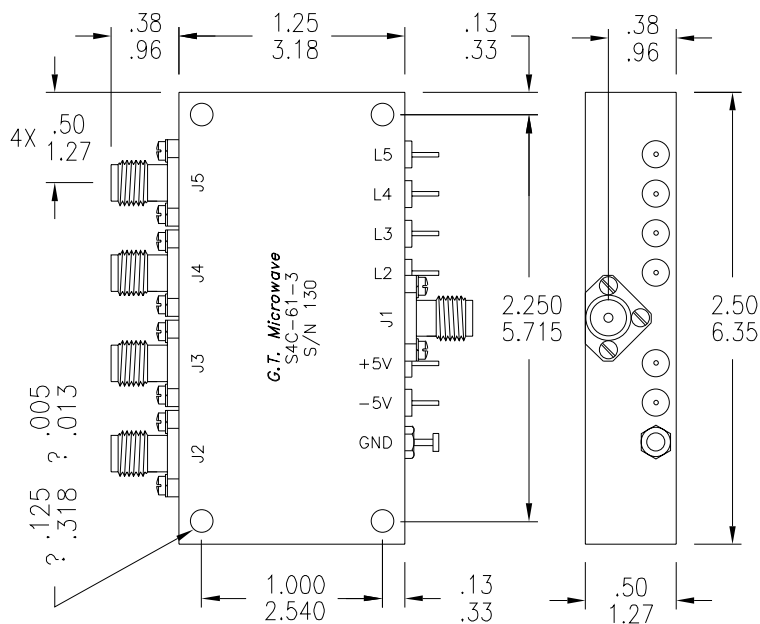
Absorptive Switches: On these models the J2 – J5 ports are NON-REFLECTIVE.

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 10⁻⁶ cc/SEC hermeticity are available. Page 8 has Environmental Ratings.

Actual Size Shown



SP4T 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 – SP4T

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	0.55	0.95	1.0	0.75	1.15	100	0.85	1.25	30	1.5:1	0.1	1.0
	60	0.75	1.15		0.95	1.35		1.05	1.45				
	80	0.85	1.25		1.05	1.45		1.15	1.55				
2.0–8.0	30	0.95	1.35	1.0	1.15	1.55	100	1.25	1.65	30	1.7:1	0.2	1.0
	60	1.2	1.6		1.4	1.8		1.5	1.9				
	80	1.3	1.7		1.5	1.9		1.6	2.0				
6.0–18.0	30	2.1	2.5	1.0	2.3	2.7	100	2.4	2.8	30	2.0:1	0.2	1.0
	60	2.3	2.7		2.5	2.9		2.6	3.0				
	80	2.5	2.9		2.7	3.1		2.8	3.2				
2.0–18.0	30	2.2	2.6	1.0	2.4	2.8	100	2.5	2.9	30	2.0:1	0.2	1.0
	60	2.4	2.8		2.6	3.0		2.7	3.1				
	80	2.6	3.0		2.8	3.2		2.9	3.3				

For substantial improvement in performance; ask for OPTIMIZED NARROWBAND models