

PIN DIODE SWITCHES — SP3T

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 @ +100/-60mA.

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

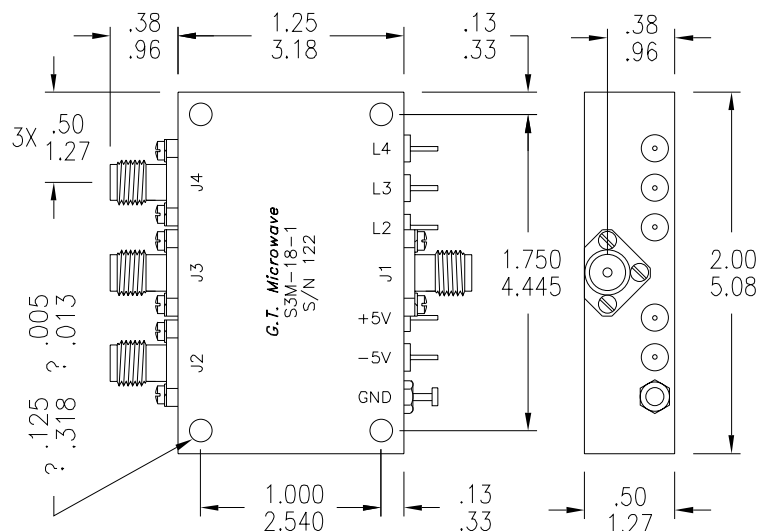
Absorptive Switches: On these models the J2 — J4 ports are NON-REFLECTIVE.

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



SP3T 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 — SP3T

| FREQ. RANGE GHz | ISOLATION dB | INSERTION LOSS dB & SWITCHING SPEED | | | INSERTION LOSS dB & SWITCHING SPEED | | | INSERTION LOSS dB & SWITCHING SPEED | | V.S.W.R. MAX | INPUT POWER WATTS | | |
|--------------------|-----------------|-------------------------------------|------|-----|-------------------------------------|------|-----|-------------------------------------|------|-----------------|----------------------|------|------|
| | | REFL | ABSP | | uSEC | REFL | | ABSP | nSEC | | REFL | ABSP | nSEC |
| 0.5-2.0 | 30 | 0.5 | 0.9 | 1.0 | 0.7 | 1.1 | 100 | 0.8 | 1.2 | 30 | 1.5:1 | 0.1 | 1.0 |
| | 60 | 0.7 | 1.1 | | 0.9 | 1.3 | | 1.0 | 1.4 | | | | |
| | 80 | 0.8 | 1.2 | | 1.0 | 1.4 | | 1.1 | 1.5 | | | | |
| 2.0-8.0 | 30 | 0.9 | 1.3 | 1.0 | 1.1 | 1.5 | 100 | 1.2 | 1.6 | 30 | 1.7:1 | 0.2 | 1.0 |
| | 60 | 1.1 | 1.5 | | 1.3 | 1.7 | | 1.4 | 1.8 | | | | |
| | 80 | 1.2 | 1.6 | | 1.4 | 1.8 | | 1.5 | 1.9 | | | | |
| 6.0-18.0 | 30 | 1.95 | 2.35 | 1.0 | 2.15 | 2.55 | 100 | 2.25 | 2.65 | 30 | 2.0:1 | 0.2 | 1.0 |
| | 60 | 2.15 | 2.55 | | 2.35 | 2.75 | | 2.45 | 2.85 | | | | |
| | 80 | 2.35 | 2.75 | | 2.55 | 2.95 | | 2.65 | 3.05 | | | | |
| 2.0-18.0 | 30 | 2.05 | 2.45 | 1.0 | 2.25 | 2.65 | 100 | 2.35 | 2.75 | 30 | 2.0:1 | 0.2 | 1.0 |
| | 60 | 2.25 | 2.65 | | 2.45 | 2.85 | | 2.55 | 2.95 | | | | |
| | 80 | 2.45 | 2.85 | | 2.65 | 3.05 | | 2.75 | 3.15 | | | | |

For substantial improvement in performance; ask for OPTIMIZED NARROWBAND models