SW-0.5G18G-16A-S-1 is a single pole, sixteen throw, absorptive switch designed to operate over the 0.5 to 18 GHz frequency range. This model is designed to handle 200 mW average input power. The switch offers fast switching speeds of 50 nsec maximum, low insertion loss of 10 dB and high isolation of 60 dB . The DC supplies are $500 \mathrm{~mA} @ \pm 5 \mathrm{~V}$.

## Mechanical Outline(mm):



## Specifications:

| Frequency: | 0.5 to 18 GHz |
| :--- | :--- |
| Insertion Loss: | 10.0 dB |
| Isolation: | 60 dB |
| Switching Speed: | 50 ns max. |
| Power Handling: | $200 \mathrm{~mW}(23 \mathrm{dBm})$ |
| VSWR: | $2.2: 1$ |
| Voltage/Current: | $500 \mathrm{~mA} @ \pm 5 \mathrm{~V}$ |
| Control logic: | THL |
| Connectors: | SMA Female |
| Type: | Absorptive |
| Control Connector: | D-sub 9 |

## Environmental Ratings:

| Temperature: | $-25^{\circ} \mathrm{C}$ to $+71^{\circ} \mathrm{C}$ Operating |
| :--- | :--- |
|  | $-65^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$ Non-Operating |
| Vibration: | MIL-STD-202F, Method 204D Cond. B |
| Altitude: | MIL-STD-202F, Method 105C Cond. B |
| Temperature Cycle: | MIL-STD-202F, Method 107D Cond. A |


| Pin Diode Switch SW-0.5G18G-16A-S-1 |  |  |  |
| :---: | :---: | :---: | :---: |
| DRAWN: | DWG NO.: | REV CODE: <br> Rev.1.0 | CQNTMPIH |
| CHECKRD: | $\begin{aligned} & \hline \text { DATE: } \\ & 20 / 05 / 16 \end{aligned}$ | $\begin{aligned} & \text { SHEET: } \\ & 1 \text { OF } 2 \end{aligned}$ | www.connphy.com sales@connphy.com |
| ISSUED: | $\begin{aligned} & \text { SIZE: } \\ & \text { A } \end{aligned}$ | SCALE : <br> N / A | Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE. |

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## Control Truth Table:

| Thru. Channel | T1 | T2 | T3 | T4 |
| :--- | :--- | :--- | :--- | :--- |
| J1 | 0 | 0 | 0 | 0 |
| J2 | 0 | 0 | 0 | 1 |
| J3 | 0 | 0 | 1 | 0 |
| J4 | 0 | 0 | 1 | 1 |
| J5 | 0 | 1 | 0 | 0 |
| J6 | 0 | 1 | 0 | 1 |
| J7 | 0 | 1 | 1 | 0 |
| J8 | 0 | 1 | 0 | 1 |
| J9 | 1 | 0 | 0 | 0 |
| J10 | 1 | 0 | 1 | 0 |
| J11 | 1 | 0 | 1 | 1 |
| J12 | 1 | 1 | 0 | 0 |
| J13 | 1 | 1 | 0 | 1 |
| J14 | 1 | 0 | 0 | 0 |

## Pin Definition:

| Pin 1: |  | T1 |  |
| :---: | :---: | :---: | :---: |
| Pin 2 : | T2 |  |  |
| Pin 3: | T3 |  |  |
| Pin 4: | T4 |  |  |
| Pin 5: | Na |  |  |
| Pin 6: | Na |  |  |
| Pin 7: | +5V |  |  |
| Pin 8: | -5V |  |  |
| Pin 9: | Gnd |  |  |
| Pin Diode Switch SW-0.5G18G-16A-S-1 |  |  |  |
| DRAWN: | DWG NO.: | $\begin{aligned} & \hline \text { REV CODE: } \\ & \text { Rev.1.0 } \end{aligned}$ | C(O) N N P H Y <br> Microwave Inc |
| CHECKRD: | DATE: <br> 20/05/16 | $\begin{aligned} & \text { SHEET : } \\ & 2 \text { OF } 2 \end{aligned}$ | www.connphy.com sales@connphy.com |
| ISSUED: | $\begin{aligned} & \text { SIZE: } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & \hline \text { SCALE : } \\ & \text { N / A } \end{aligned}$ | Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE. |

