



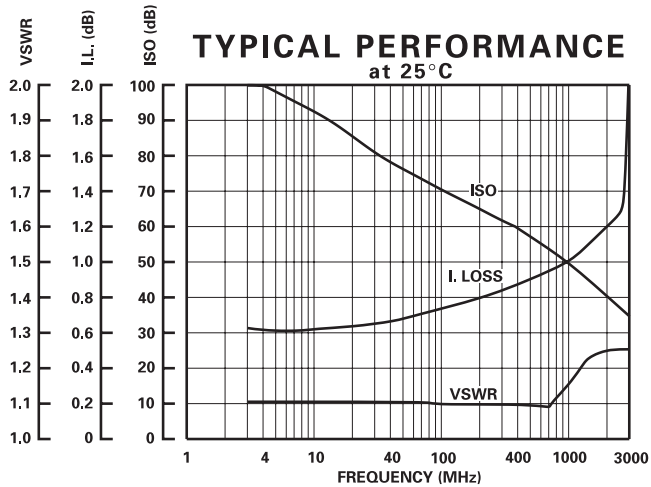
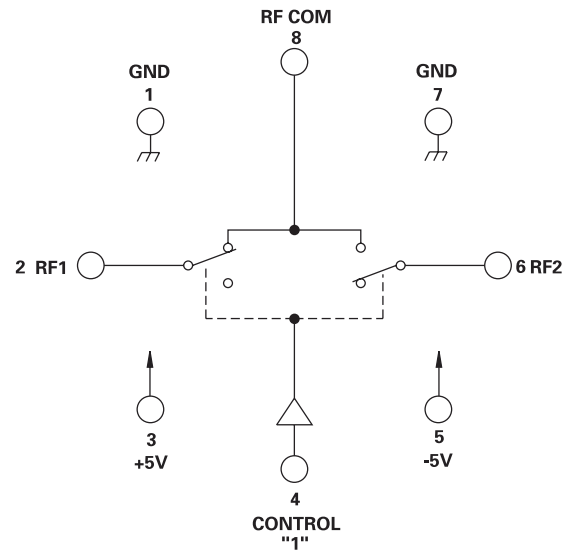
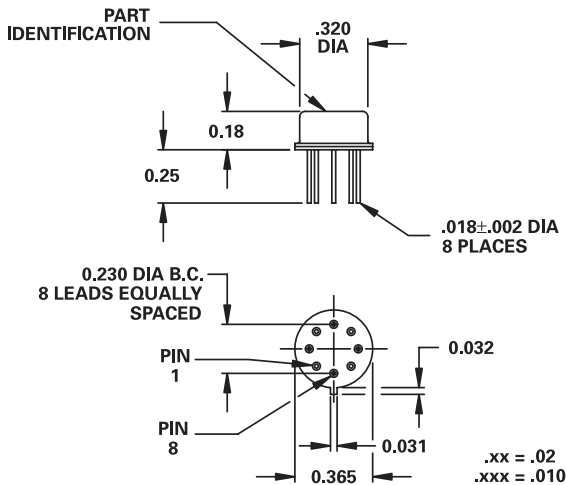
# MODEL NUMBER DSW21965

## GaAs SP2T

### FEATURES

- DC - 2000 MHz
- < 1 mA, ±5 VDC
- 17 nSec Switching Speed
- High Isolation
- TTL Driver
- Ultra Small TO-5 Package

### SP2T



| LOGIC TABLE |            |
|-------------|------------|
| TTL Control | RF Com To: |
| 1           | RF1        |
| 0           | RF2        |

### GUARANTEED PERFORMANCE

| Parameter                    | Min                  | Typ              | Max            | Units | Conditions   |
|------------------------------|----------------------|------------------|----------------|-------|--|
| Operating Frequency          | DC                   |                  | 2000           | MHz   |  |
| DC Current                   |                      | 0.3<br>0.01      | 1<br>1         | mA    | AT +5 VDC Supply<br>AT -5 VDC Supply                               |
| Control Type                 |                      | TTL              |                |       | 1 Line<br>Logic "0" = RF COM to RF 2<br>Logic "1" = RF COM to RF 1 |
| Control Current              | High<br>Low          | 1<br>1           | ±40<br>±40     | µA    | V <sub>IH</sub> = +2.7V<br>V <sub>IL</sub> = +0.5V                 |
| Insertion Loss               |                      | 1.0<br>1.2       | 1.5<br>1.7     | dB    | DC - 1000 MHz<br>1000 - 2000 MHz                                   |
| Isolation                    | 60<br>50<br>30       | 70<br>58<br>42   |                | dB    | DC - 100 MHz<br>100 - 500 MHz<br>500 - 2000 MHz                    |
| VSWR                         |                      | 1.15/1<br>1.25/1 | 1.2/1<br>1.5/1 |       | DC - 500 MHz<br>500 - 2000 MHz                                     |
| Impedance                    |                      | 50               |                | OHMS  |  |
| Switching Speed              |                      | 17               | 150            | nSEC  | 50% TTL to 90% / 10% RF  |
| Transition (Rise/Fall) Time  |                      | 4                |                | nSEC  | 10% / 90% or 90% / 10% RF  |
| Switching (Video) Transients |                      | 20               |                | mV    | Peak Value   |
| Intercept Points             | 2nd<br>3rd           | +80<br>+43       |                | dBm   | 70 MHz / 50 MHz<br>35 MHz / 50 MHz                                 |
| RF Power                     | Operate<br>No Damage | +12<br>+30       | +10<br>+30     | dBm   | 0.1 dB Comp. Above 20 MHz  |
| Operating Temperature        | -55                  | +25              | +125           | °C    | TA   |