

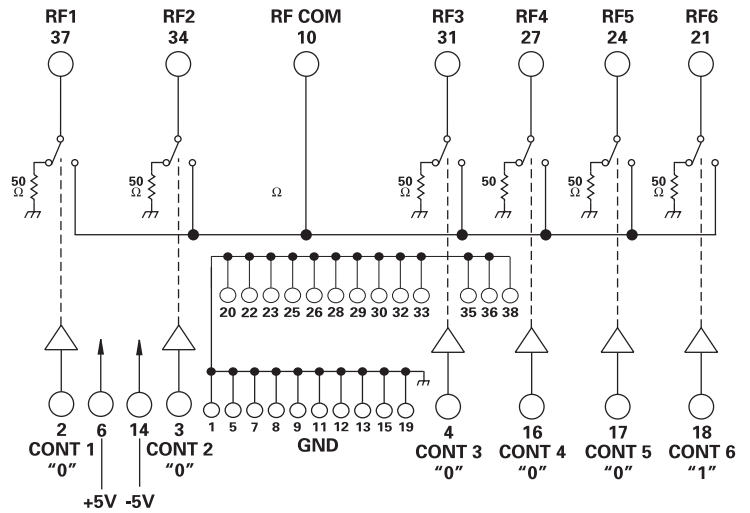
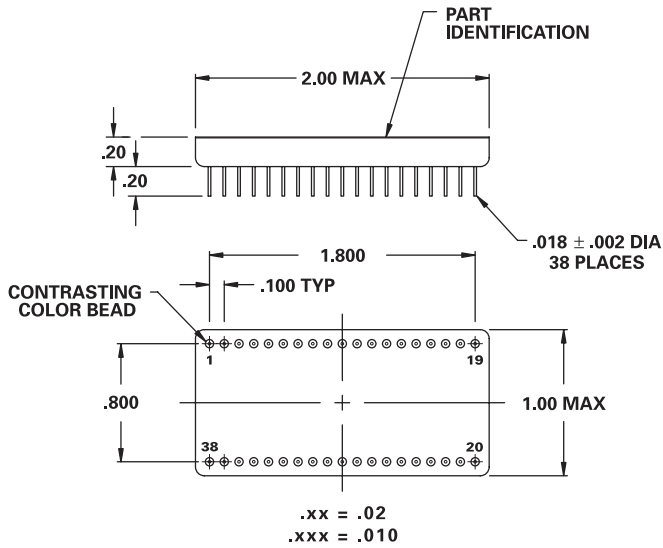
**MODEL NUMBER  
DS0506**

**PIN Diode SP6T**

**FEATURES**

- 100 - 600 MHz
- 0.6 dB Insertion Loss
- Handles +25 dBm
- 250 nSec Switching Speed
- Non-Reflective
- TTL Driver
- 38 Pin DIP

**SP6T**



**GUARANTEED PERFORMANCE**

| Parameter                    | Min | Typ       | Max    | Units | Conditions                                  |
|------------------------------|-----|-----------|--------|-------|---|
| Operating Frequency          | 100 |           | 600    | MHz   |   |
| DC Current                   |     | 25        | 35     | mA    | At +5 VDC Supply                            |
|                              |     | 30        | 45     | mA    | At -5 VDC Supply                            |
| Control Type                 |     | TTL       |        |       | 6 Line<br>Logic "0" = Off<br>Logic "1" = On |
| Control Current              |     | High      | 40     | μA    | VIH = +2.7 V                                |
|                              |     | Low       | -400   | μA    | VIL = +0.5 V                                |
| Insertion Loss               |     | 0.6       | 1.0    | dB    |   |
| Isolation                    | 50  | 56        |        | dB    |   |
| VSWR                         |     | 1.2/1     | 1.50/1 |       |   |
| Impedance                    |     | 50        |        | OHMS  |   |
| Switching Speed              |     | 0.25      | 1      | μSEC  | 50% TTL to 90% / 10% RF                     |
| Transition (Rise/Fall) Time  |     | 0.1       |        | μSEC  | 10% / 90% or 90% / 10% RF                   |
| Switching (Video) Transients |     | 700       |        | mV    | Peak Value                                  |
| Intercept Points             |     | 2nd       | +90    | dBm   | 60 MHz / 160 MHz                            |
|                              |     | 3rd       | +50    | dBm   | 130 MHz / 160 MHz                           |
| RF Power                     |     | Operate   | +25    | dBm   | 0.1 dB Compression                          |
|                              |     | No Damage | +30    | dBm   |   |
| Operating Temperature        | -55 | +25       | +125   | °C    | TA  |

