

## PAD1, PAD2, PAD5

## Low Leakage Pico-Amp Diode

### High Impedance Protection Circuits

#### Absolute maximum ratings at $T_A = 25^\circ\text{C}$

Continuous Forward Gate Current

50 mA

Storage Temperature Range

- 55°C to + 125°C

Lead Temperature

300°C

#### At 25°C free air temperature:

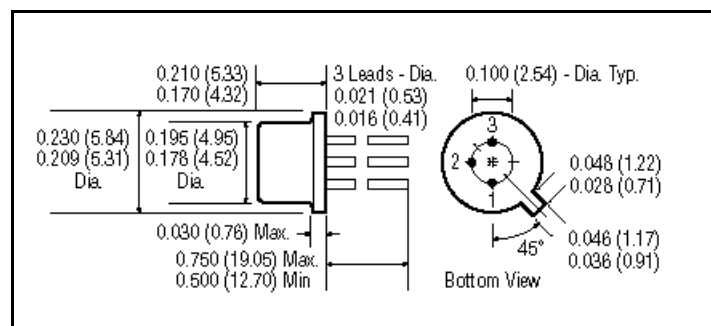
##### Electrical Characteristics

|                           |        | PAD1 |     |     | PAD2 |     |     | Process NJ01 |                                              |
|---------------------------|--------|------|-----|-----|------|-----|-----|--------------|----------------------------------------------|
|                           |        | Min  | Typ | Max | Min  | Typ | Max | Unit         | Test Conditions                              |
| Reverse Current           | $I_R$  |      |     | - 1 |      |     | - 2 | pA           | $V_R = - 20\text{V}$                         |
| Breakdown Reverse Voltage | $BV_R$ | - 45 |     |     | - 45 |     |     | V            | $I_R = - 1\ \mu\text{A}$                     |
| Forward Voltage Drop      | $V_F$  |      | 0.8 | 1.5 |      | 0.8 | 1.5 | V            | $I_F = 5\ \text{mA}$                         |
| Capacitance               | $C_R$  |      |     | 0.8 |      |     | 0.8 | pF           | $V_R = - 5\ \text{V}$<br>$f = 1\ \text{MHz}$ |

#### At 25°C free air temperature:

##### Electrical Characteristics

|                           |        | PAD5 |     |     | Process NJ01 |                                              |
|---------------------------|--------|------|-----|-----|--------------|----------------------------------------------|
|                           |        | Min  | Typ | Max | Unit         | Test Conditions                              |
| Reverse Current           | $I_R$  |      |     | - 5 | pA           | $V_R = - 20\text{V}$                         |
| Breakdown Reverse Voltage | $BV_R$ | - 45 |     |     | V            | $I_R = - 1\ \mu\text{A}$                     |
| Forward Voltage Drop      | $V_F$  |      | 0.8 | 1.5 | V            | $I_F = 5\ \text{mA}$                         |
| Capacitance               | $C_R$  |      |     | 0.8 | pF           | $V_R = - 5\ \text{V}$<br>$f = 1\ \text{MHz}$ |



#### TO-18 Package

Dimensions in Inches (mm)

#### Pin Configuration

1 Cathode, 2 Case, 3 Anode

#### Surface Mount(SOT23)

#### TO-236 Package

See Section G for Outline Dimensions

#### Pin Configuration

1 Cathode, 2 Cathode, 3 Anode