

## Linear Systems replaces discontinued Siliconix JPAD20

The JPAD20 is a low leakage Pico-Amp Diode packaged in TO-92

The JPAD20 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The JPAD20 features a leakage current of -20 pA and is well suited for use in applications such as input protection for operational amplifiers.

### JPAD20 Benefits:

- Negligible Circuit Leakage Contribution
- Circuit "Transparent" Except to Shunt High-Frequency Spikes
- Simplicity of Operation

### JPAD20 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

### FEATURES

DIRECT REPLACEMENT FOR SILICONIX JPAD20

REVERSE BREAKDOWN VOLTAGE  $BV_R \geq -35V$

ULTRALOW LEAKAGE  $\leq 20 \text{ pA}$

REVERSE CAPACITANCE  $C_{RSS} \leq 2.0\text{pF}$

### ABSOLUTE MAXIMUM RATINGS

@ 25°C (unless otherwise noted)

### Maximum Temperatures

Storage Temperature  $-65^\circ\text{C}$  to  $+150^\circ\text{C}$

Operating Junction Temperature  $-55^\circ\text{C}$  to  $+135^\circ\text{C}$

### Maximum Power Dissipation

Continuous Power Dissipation 350mW

### MAXIMUM CURRENT

Forward Current (Note 1) 10mA

### JPAD20 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

| SYMBOL    | CHARACTERISTICS                 | MIN. | TYP. | MAX. | UNITS | CONDITIONS                   |
|-----------|---------------------------------|------|------|------|-------|------------------------------|
| $BV_R$    | Reverse Breakdown Voltage       | -35  | --   | --   | V     | $I_R = -1\mu\text{A}$        |
| $V_F$     | Forward Voltage                 | --   | 0.8  | 1.5  | V     | $I_F = 5\text{mA}$           |
| $C_{RSS}$ | Total Reverse Capacitance       | --   | 1.5  | 2    | pF    | $V_R = -5V, f = 1\text{MHz}$ |
| $I_R$     | Maximum Reverse Leakage Current | --   | --   | -20  | pA    | $V_R = -20V$                 |

### Notes:

1. Absolute maximum ratings are limiting values above which JPAD20 serviceability may be impaired.

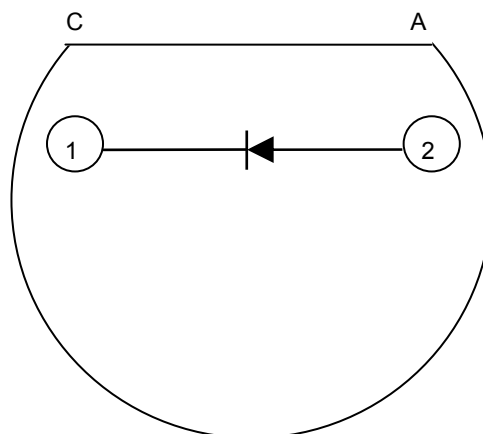
### Available Packages:

JPAD20 in TO-92  
JPAD20 available as bare die

Please contact Micross for full package and die dimensions



TO-92 (Bottom View)



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