

## Linear Systems replaces discontinued Siliconix SSTPAD10

The SSTPAD10 is a low leakage Pico-Amp Diode packaged in SOT-23

The SSTPAD10 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The SSTPAD10 features a leakage current of -10 pA and is well suited for use in applications such as input protection for operational amplifiers.

### SSTPAD10 Benefits:

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

### SSTPAD10 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

### FEATURES

DIRECT REPLACEMENT FOR SILICONIX SSTPAD10

REVERSE BREAKDOWN VOLTAGE  $BV_R \geq -30V$

ULTRALOW LEAKAGE  $\leq 10 \text{ pA}$

REVERSE CAPACITANCE  $C_{RSS} \leq 2\text{pF}$

### ABSOLUTE MAXIMUM RATINGS

@ 25°C (unless otherwise noted)

### Maximum Temperatures

Storage Temperature -65°C to +150°C

Operating Junction Temperature -55°C to +135°C

### Maximum Power Dissipation

Continuous Power Dissipation 350mW

### MAXIMUM CURRENT

Forward Current (Note 1) 10mA

### SSTPAD10 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

| SYMBOL    | CHARACTERISTICS                 | MIN. | TYP. | MAX. | UNITS | CONDITIONS                   |
|-----------|---------------------------------|------|------|------|-------|------------------------------|
| $BV_R$    | Reverse Breakdown Voltage       | -35  | --   | --   | V     | $I_R = -1\mu A$              |
| $V_F$     | 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 | --   | --   | -10  | pA    | $V_R = -20V$                 |

### Notes:

1. Absolute maximum ratings are limiting values above which SSTPAD10 serviceability may be impaired.

### Available Packages:

SSTPAD10 in SOT-23  
SSTPAD10 available as bare die

Please contact Micross for full package and die dimensions



### Micross Components Europe

Tel: +44 1603 788967

Email: [chipcomponents@micross.com](mailto:chipcomponents@micross.com)

Web: <http://www.micross.com/distribution.com>

SOT-23 (Top View)

