

## Linear Systems replaces discontinued Siliconix SSTPAD50

The SSTPAD50 is a low leakage Pico-Amp Diode packaged in SOT-23

The SSTPAD50 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The SSTPAD50 features a leakage current of -50 pA and is well suited for use in applications such as input protection for operational amplifiers.

### SSTPAD50 Benefits:

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

### SSTPAD50 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

### FEATURES

DIRECT REPLACEMENT FOR SILICONIX SSTPAD50

REVERSE BREAKDOWN VOLTAGE  $BV_R \geq -30V$

ULTRALOW LEAKAGE  $\leq 50 \text{ pA}$

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

### SSTPAD50 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	--	--	-50	pA	$V_R = -20V$

### Notes:

1. Absolute maximum ratings are limiting values above which SSTPAD50 serviceability may be impaired.

### Available Packages:

SSTPAD50 in SOT-23  
SSTPAD50 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)

