

## Linear Systems replaces discontinued Siliconix SSTPAD5

The SSTPAD5 is a low leakage Pico-Amp Diode packaged in SOT-23

The SSTPAD5 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The SSTPAD5 features a leakage current of -5 pA and is well suited for use in applications such as input protection for operational amplifiers.

### SSTPAD5 Benefits:

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

### SSTPAD5 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

### FEATURES

DIRECT REPLACEMENT FOR SILICONIX SSTPAD5

REVERSE BREAKDOWN VOLTAGE  $BV_R \geq -30V$

ULTRALOW LEAKAGE  $\leq 5 \text{ pA}$

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

### SSTPAD5 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	--	--	-5	pA	$V_R = -20V$

### Notes:

1. Absolute maximum ratings are limiting values above which SSTPAD5 serviceability may be impaired.

### Available Packages:

SSTPAD5 in SOT-23  
SSTPAD5 available as bare die

Please contact Micross for full package and die dimensions



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SOT-23 (Top View)

