



# Linear Systems replaces discontinued Siliconix JPAD50

# The LSJPAD50 is a low leakage Pico-Amp Diode packaged in TO-92

The LSJPAD50 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The LSJPAD50 features a leakage current of -50 pA and is well suited for use in applications such as input protection for operational amplifiers.

#### LSJPAD50 Benefits:

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

### **LSJPAD50 Applications:**

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES						
DIRECT REPLACEMENT FOR SILICONIX JPAD50						
VERSE BREAKDOWN VOLTAGE BV <sub>R</sub> ≥ -35V						
ULTRALOW LEAKAGE	≤ 50 pA					
REVERSE CAPACITANCE	C <sub>rss</sub> ≤ 2.0pF					
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					

LSJPAD50 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
$BV_R$	Reverse <mark>Br</mark> eakdown Voltage	-35-			V	- I <sub>R</sub> =-1μΑ
$V_{F}$	Forward <mark>Vo</mark> ltage		0.8	1.5	V	$I_F = 5mA$
$C_{rSS}$	Total Reverse Capacitance		1.5	2	pF	$V_R = -5V$ , $f = 1$ MHz
I <sub>R</sub>	Maximum Reverse Leakage Current			-50	pA	V <sub>R</sub> = - 20V

#### Notes:

1. Absolute maximum ratings are limiting values above which LSJPAD50 serviceability may be impaired.

#### Available Packages:

LSJPAD50 in TO-92 LSJPAD50 available as bare die

Please contact Micross for full package and die dimensions

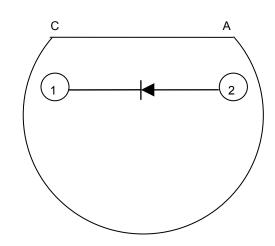


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## TO-92 (Bottom View)



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