

## Linear Systems replaces discontinued Siliconix PAD50

The PAD50 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The PAD50 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The PAD50 features a leakage current of -50 pA and is well suited for use in applications such as input protection for operational amplifiers.

**PAD50 Benefits:**

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

**PAD50 Applications:**

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES	
DIRECT REPLACEMENT FOR SILICONIX PAD50	
REVERSE BREAKDOWN VOLTAGE	$BV_R \geq -45V$
ULTRALOW LEAKAGE	$\leq 50 \text{ pA}$
REVERSE CAPACITANCE	$C_{RSS} \leq 2.0\text{pF}$
<b>ABSOLUTE MAXIMUM RATINGS</b> @ 25°C (unless otherwise noted)	
<b>Maximum Temperatures</b>	
Storage Temperature	-65°C to +150°C
Operating Junction Temperature	-55°C to +135°C
<b>Maximum Power Dissipation</b>	
Continuous Power Dissipation	300mW
<b>MAXIMUM CURRENT</b>	
Forward Current (Note 1)	50mA

**PAD50 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)**

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
$BV_R$	Reverse Breakdown Voltage	-45	--	--	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	--	--	-50	pA	$V_R = -20V$

**Notes:**

- Absolute maximum ratings are limiting values above which PAD50 serviceability may be impaired.

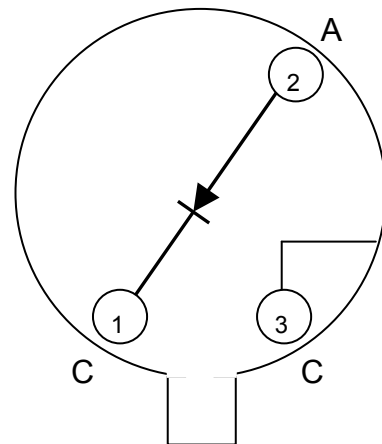
**Available Packages:**

PAD50 in TO-72  
PAD50 available as bare die

Please contact Micross for full package and die dimensions



TO-72 (Bottom View)



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