





# Linear Systems replaces discontinued Siliconix PAD10

# The PAD10 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The PAD10 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The PAD10 features a leakage current of -10 pA and is well suited for use in applications such as input protection for operational amplifiers.

#### PAD10 Benefits:

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

## **PAD10 Applications:**

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES				
DIRECT REPLACEMENT FOR SILICONIX PAD10				
REVERSE BREAKDOWN VOLTAGE	BV <sub>R</sub> ≥ -45V			
ULTRALOW LEAKAGE	≤ 10 pA			
REVERSE CAPACITANCE	C <sub>rss</sub> ≤ 2.0pF			
ABSOLUTE MAXIMUM RATINGS				
@ 25°C (unless otherwise noted)				
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Maximum Temperatures				
Storage Temperature	-65°C to +150°C			
Operating Junction Temperature	-55°C to +135°C			
Maximum Power Dissipation				
Continuous Power Dissipation	300mW			
MAXIMUM CURRENT				
Forward Current (Note 1)	50mA			

#### PAD10 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
BV <sub>R</sub>	Reverse <mark>Br</mark> eakdown Voltage	<del>-45</del> -	1		V	
V <sub>F</sub>	Forward Voltage		0.8	1.5	V	I <sub>F</sub> = <mark>5</mark> mA
C <sub>rSS</sub>	Total Reverse <mark>C</mark> apa <mark>ci</mark> tance		1.5	2	pF	$V_R = -5V$ , $f = 1MHz$
I <sub>R</sub>	Maximum Reverse Leakage Current		1	-10	pA	V <sub>R</sub> = - 20V

#### Notes:

1. Absolute maximum ratings are limiting values above which PAD10 serviceability may be impaired.

#### Available Packages:

PAD10 in TO-72 PAD10 available as bare die

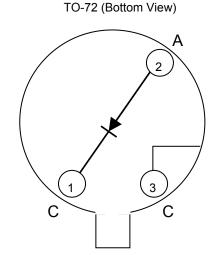
Please contact Micross for full package and die dimensions



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