





Linear Systems replaces discontinued Siliconix PAD2

The PAD2 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The PAD2 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The PAD2 features a leakage current of -2 pA and is well suited for use in applications such as input protection for operational amplifiers.

PAD2 Benefits:

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

PAD2 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES					
DIRECT REPLACEMENT FOR SILICONIX PAD2					
REVERSE BREAKDOWN VOLTAGE	BV _R ≥ -45V				
ULTRALOW LEAKAGE	≤ 2 pA				
REVERSE CAPACITANCE	$C_{rss} \le 2.0pF$				
ABSOLUTE MAXIMUM RATINGS					
@ 25°C (unless otherwise noted)					
Maximum Tomporatures					
Maximum Temperatures	1				
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				

PAD2 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

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V _F Forward Voltage 0.8 1.5 V I _F = 5mA	BV _R	Reverse <mark>Br</mark> eakdown Voltage	-45 -			V	- I _R =-1μΑ
	V _F	Forward Voltage		0.8	1 5 1	V	I _F = 5mA
C_{rss} Total Reverse Capacitance 1.5 2 pF $V_R = -5V$, $f = 1$ MHz	C _{rSS}	Total Reverse Capacitance		1.5	2	pF	$V_R = -5V$, $f = 1$ MHz
I _R Maximum Reverse Leakage Current2 pA V _R = -20V	I _R	Maximum Reverse Leakage Current			-2	pA	V _R = - 20V

Notes:

1. Absolute maximum ratings are limiting values above which PAD2 serviceability may be impaired.

Available Packages:

PAD2 in TO-72

PAD2 available as bare die

Please contact Micross for full package and die dimensions



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TO-72 (Bottom View)

www.DataSheet4I.J.com

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