

Linear Systems replaces discontinued Siliconix PAD100

LSPAD100 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The LSPAD100 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The LSPAD100 features a leakage current of -100 pA and is well suited for use in applications such as input protection for operational amplifiers.

LSPAD100 Benefits:

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

LSPAD100 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES

DIRECT REPLACEMENT FOR SILICONIX PAD100

REVERSE BREAKDOWN VOLTAGE	$BV_R \geq -45V$
ULTRALOW LEAKAGE	≤ 100 pA
REVERSE CAPACITANCE	$C_{RSS} \leq 2.0pF$

ABSOLUTE MAXIMUM RATINGS

@ 25°C (unless otherwise noted)

Maximum Temperatures

Storage Temperature	$-65^{\circ}C$ to $+150^{\circ}C$
Operating Junction Temperature	$-55^{\circ}C$ to $+135^{\circ}C$

Maximum Power Dissipation

Continuous Power Dissipation	300mW
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MAXIMUM CURRENT

Forward Current (Note 1)	50mA
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LSPAD100 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	$I_F = 5mA$
C_{RSS}	Total Reverse Capacitance	--	1.5	2	pF	$V_R = -5V, f = 1MHz$
I_R	Maximum Reverse Leakage Current	--	--	-100	pA	$V_R = -20V$

Notes:

1. Absolute maximum ratings are limiting values above which LSPAD100 serviceability may be impaired.

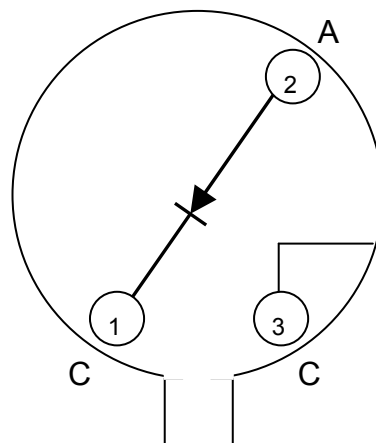
Available Packages:

LSPAD100 in TO-72
LSPAD100 available as bare die

Please contact Micross for full package and die dimensions



TO-72 (Bottom View)



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