

### LSPAD5 LOW LEAKAGE PICO-AMP DIODE



# Linear Systems replaces discontinued Siliconix PAD5

## LSPAD5 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The LSPAD5 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The LSPAD5 features a leakage current of -5 pA and is well suited for use in applications such as input protection for operational amplifiers.

#### LSPAD5 Benefits:

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

#### **LSPAD5 Applications:**

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES					
DIRECT REPLACEMENT FOR SILICONIX PAD5					
REVERSE BREAKDOWN VOLTAGE BV <sub>R</sub> ≥ -45V					
ULTRALOW LEAKAGE	≤ 5 pA				
REVERSE CAPACITANCE	C <sub>rss</sub> ≤ 0.8pF				
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	010				
Continuous Power Dissipation 300mW					
MAXIMUM CURRENT					
Forward Current (Note 1)	50mA				

LSPAD5 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
$BV_R$	Reverse <mark>Br</mark> eakdown Voltage	<del>-4</del> 5-	1		V	1μA
$V_{F}$	Forward <mark>Vo</mark> ltage		0.8	1.5	V	$I_F = 5mA$
$C_{rSS}$	Total Reverse Capacitance		0.5	0.8	pF	$V_R = -5V$ , $f = 1$ MHz
I <sub>R</sub>	Maximum Reverse Leakage Current		-	-5	pA	V <sub>R</sub> = - 20V

#### Notes:

1. Absolute maximum ratings are limiting values above which LSPAD5 serviceability may be impaired.

#### Available Packages:

LSPAD5 in TO-72 LSPAD5 available as bare die

Please contact Micross for full package and die dimensions

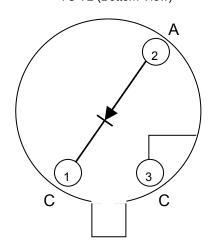


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#### TO-72 (Bottom View)



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