

PAD100 LOW LEAKAGE PICO-AMP DIODE



Linear Systems replaces discontinued Siliconix PAD100

The PAD100 is a low leakage Pico-Amp Diode packaged in hermetic TO-72

The PAD100 extremely low-leakage diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. The PAD100 features a leakage current of -100 pA and is well suited for use in applications such as input protection for operational amplifiers.

PAD100 Benefits:

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

PAD100 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES								
DIRECT REPLACEMENT FOR SILICONIX PAD100								
REVERSE BREAKDOWN VOLTAGE	BV _R ≥ -45V							
ULTRALOW LEAKAGE	≤ 100 pA							
REVERSE CAPACITANCE $C_{rss} \le 2.0 pF$								
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								
ontinuous Power Dissipation 300mW								
MAXIMUM CURRENT								
Forward Current (Note 1)	50mA							

PAD100 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
C _{rss} Total Reverse Capacitance 1.5 2 pF V _R = -5V, f = 1MHz	BV_R	Reverse <mark>Br</mark> eakdown Voltage	-4 5-			٧	I _R =-1μΑ
1133	V_{F}	Forward Voltage		0.8	1.5	V	$I_F = 5 \text{mA}$
I _R Maximum Reverse Leakage Current100 pA V _R = - 20V	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 PAD100 serviceability may be impaired.

Available Packages:

PAD100 in TO-72

PAD100 available as bare die

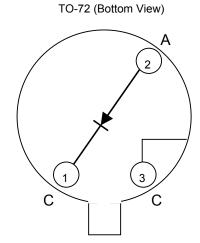
Please contact Micross for full package and die dimensions



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