

DPAD50 LOW LEAKAGE PICO-AMP DUAL DIODE



Linear Systems replaces discontinued Siliconix DPAD50

The DPAD50 is a low leakage Monolithic Dual Pico-Amp Diode

The DPAD50 extremely low-leakage monolithic dual diode provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. In addition the monolithic dual construction allows excellent capacitance matching per diode. The DPAD50 features a leakage current of -50 pA and is well suited for use in applications such as input protection for operational amplifiers.

DPAD50 Benefits:

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

DPAD50 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES					
DIRECT REPLACEMENT FOR SILICONIX DPAD50					
HIGH ON ISOLATION	20fA				
EXCELLENT CAPACITANCE MATCHING	$\Delta C_R \le 0.5 pF$				
ULTRALOW LEAKAGE	≤ 50 pA				
REVERSE BREAKDOWN VOLTAGE	BV _R ≥ -45V				
REVERSE CAPACITANCE	C _{rss} ≤ 2.0pF				
ABSOLUTE MAXIMUM RATINGS					
@ 25°C (unless otherwise noted)					
Maximum Temperatures					
Storage Temperature	-65°C to +150°C				
Operating Junction Temperature	unction Temperature -55°C to +135°C				
Maximum Power Dissipation					
ntinuous Power Dissipation 500mW					
MAXIMUM CURRENT					
Forward Current (Note 1)	50mA				

DPAD50 ELECT	RICAL CHARACTERISTICS @ 25°C (unle	s otherwi	se noted)	1		
SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
BV_R	Reverse <mark>Br</mark> eakd <mark>o</mark> wn <mark>V</mark> oltage	-45			V	$I_R = -1\mu A$
V_{F}	Forward Voltage		0.8	1.5	V	I _F = 1mA
C_{rSS}	Total Reverse Capacitance			2.0	pF	$V_R = -5V$, $f = 1MHz$
C _{R1} -C _{R2}	Differential Capacitance (ΔC _R)			0.5	pF	$V_{R1} = V_{R2} = -5V, f = 1MHz$
I _R	Maximum Reverse Leakage Current			-50	рА	V _R = - 20V

Notes:

1. Absolute maximum ratings are limiting values above which DPAD50 serviceability may be impaired.

Available Packages:

DPAD50 in TO-72

DPAD50 available as bare die

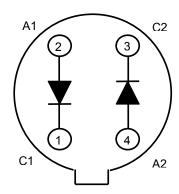
Please contact Micross for full package and die dimensions



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