

SSTDPAD5 LOW LEAKAGE PICO-AMP DUAL DIODE



Linear Systems replaces discontinued Siliconix SSTDPAD5

The SSTDPAD5 is a low leakage Monolithic Dual Pico-Amp Diode

The SSTDPAD5 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 SSTDPAD5 features a leakage current of -5 pA and is well suited for use in applications such as input protection for operational amplifiers.

SSTDPAD5 Benefits:

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

SSTDPAD5 Applications:

- Op Amp Input Protection
- Multiplexer Overvoltage Protection

FEATURES					
DIRECT REPLACEMENT FOR SILICONIX SSTDPAD5					
HIGH ON ISOLATION	20fA				
EXCELLENT CAPACITANCE MATCHING	$\Delta C_R \le 0.5 pF$				
ULTRALOW LEAKAGE	≤ 5 pA				
REVERSE BREAKDOWN VOLTAGE	BV _R ≥ -30V				
REVERSE CAPACITANCE $C_{rss} \le 4.0 pF$					
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					
Continuous Power Dissipation	500mW				
MAXIMUM CURRENT					
Forward Current (Note 1)	50mA				

SSTDPAD5 ELECTRICAL CHARACTERISTICS @-25°C (unless otherwise noted)						
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	>	I _F = 1mA
C_{rSS}	Total Reverse Capacitance			2.0	pF	$V_R = -5V$, $f \neq 1MHz$
C _{R1} -C _{R2}	Differential Capacitance (ΔC _R)			0.5	pF	$V_{R1} = V_{R2} = -5V, f = 1MHz$
I _R	Maximum Reverse Leakage Current			-100	рА	V _R = - 20V

Notes:

1. Absolute maximum ratings are limiting values above which SSTDPAD5 serviceability may be impaired.

Available Packages:

SSTDPAD5 in SOIC SSTDPAD5 available as bare die

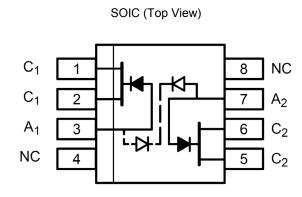
Please contact Micross for full package and die dimensions



Micross Components Europe

Tel: +44 1603 788967

Email: chipcomponents@micross.com
Web: http://www.micross.com/distribution.com



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