

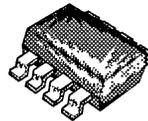
SSTDPAD5 SERIES

Dual Low-Leakage Pico-Amp Diodes

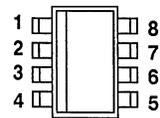
The SSTDPAD5 Series of extremely low-leakage diodes provides a superior alternative to conventional diode technology when reverse current (leakage) must be minimized. These devices feature leakage currents ranging from -5 pA (SSTDPAD5) to -100 pA (SSTDPAD100) to support a wide range of applications. With two diodes per package, the SSTDPAD5 Series is well suited for use in applications such as input protection for operational amplifiers. Its SO-8 package allows designers to maximize circuit performance while maintaining the objectives of low cost and compact packaging. Tape and reel is available for use with automated assembly techniques. (See Section 8.)

PART NO.	I_R (pA)
SSTDPAD5	-5
SSTDPAD10	-10
SSTDPAD20	-20
SSTDPAD50	-50
SSTDPAD100	-100

SO-8



TOP VIEW



SIMILAR PRODUCTS

- TO-71/TO-78, See DPAD1 Series
- TO-92, See JPAD5 Series
- SOT-23, See SSTPAD5 Series
- TO-18, See PAD1 Series
- Chips, Order DPADXXCHP

- 1 CATHODE 1
- 2 CATHODE 1
- 3 ANODE 1
- 4 N/C
- 5 CATHODE 2
- 6 CATHODE 2
- 7 ANODE 2
- 8 N/C

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETERS/TEST CONDITIONS	SYMBOL	LIMIT	UNITS
Forward Current	I_F	50	mA
Total Device Dissipation	P_D	400	mW
Storage Temperature	T_{stg}	-55 to 125	°C
Lead Temperature (1/16" from case for 10 seconds)	T_L	300	

ELECTRICAL CHARACTERISTICS ¹							
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT	
			TYP ²	MIN	MAX		
STATIC							
Reverse Current	I_R	$V_R = -20\text{ V}$	SSTDPAD5	-2		-5	pA
			SSTDPAD10	-2		-10	
			SSTDPAD20	-5		-20	
			SSTDPAD50	-10		-50	
			SSTDPAD100	-10		-100	
Reverse Breakdown Voltage	BV_R	$I_R = -1\ \mu\text{A}$	-50	-30		V	
Forward Voltage Drop	V_F	$I_F = 1\ \text{mA}$	0.8		1.5		
DYNAMIC							
Reverse Capacitance	C_R	$V_R = -5\ \text{V}, f = 1\ \text{MHz}$	2		4	pF	
Differential Capacitance	$ C_{R1} - C_{R2} $	$V_{R1} = V_{R2} = -5\ \text{V}, f = 1\ \text{MHz}$	0.1		0.5		

NOTES: 1. $T_A = 25\ ^\circ\text{C}$ unless otherwise noted.
 2. For design aid only, not subject to production testing.