SSTPAD5 SERIES

Siliconix incorporated

Low-Leakage Pico-Amp Diodes

The SSTPAD5 Series of 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 (SSTPAD5) to –500 pA (SSTPAD500) to support varying system requirements. Its SOT-23 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)
SSTPAD5	–5
SSTPAD10	–10
SSTPAD20	–20
SSTPAD50	–50
SSTPAD100	–100
SSTPAD200	–200
SSTPAD500	–500

SIMILAR PRODUCTS

- TO-92, See JPAD5 Series
- TO-18, See PAD1 Series
- Duals, See SSTDPAD5 Series
- Chips, Order PADXXCHP

PRODUCT MARKING	
SSTPAD5	005
SSTPAD10	010
SSTPAD20	020
SSTPAD50	050
SSTPAD100	100
SSTPAD200	200
SSTPAD500	500

SOT-23 TOP VIEW

1 ANODE
2 CATHODE
3 CATHODE

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

PARAMETERS/TEST CONDITIONS	SYMBOL	LIMIT	UNITS
Forward Current	I_F	10	mA
Total Device Dissipation	P_D	350	mW
Storage Temperature	T_{stg}	–55 to 150	°C
Lead Temperature (1/16" from case for 10 seconds)	T_L	300	

ELECTRICAL CHARACTERISTICS [1]							
				LIMITS			
PARAMETER	SYMBOL	TEST CONDITIONS		TYP [2]	MIN	MAX	UNIT
STATIC							
Reverse Current	I_R	V_R = -20 V	SSTPAD5	-1		-5	pA
			SSTPAD10	-2		-10	
			SSTPAD20	-4		-20	
			SSTPAD50	-5		-50	
			SSTPAD100	-10		-100	
			SSTPAD200	-15		-200	
			SSTPAD500	-25		-500	
Reverse Breakdown Voltage	BV_R	I_R = -1 µA		-60	-35		V
Forward Voltage Drop	V_F	I_F = 5 mA		0.8		1.5	
DYNAMIC							
Reverse Capacitance	C_R	V_R = -5 V, f = 1 MHz		1.5		2	pF

NOTES: 1. T_A = 25 °C unless otherwise noted.
2. For design aid only, not subject to production testing.