

# SSTPAD5 SERIES

## 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.)

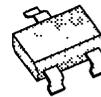
PART NO.	$I_R$ (pA)
SSTPAD5	-5
SSTPAD10	-10
SSTPAD20	-20
SSTPAD50	-50
SSTPAD100	-100
SSTPAD200	-200
SSTPAD500	-500

### SIMILAR PRODUCTS

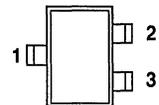
- TO-92, See JPAD5 Series
- TO-18, See PAD1 Series
- Duals, See SSTDPAD5 Series
- Chips, Order PADXXCHP

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 ( $T_A = 25^\circ\text{C}$ 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 <sup>1</sup>							
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT	
			TYP <sup>2</sup>	MIN	MAX		
<b>STATIC</b>							
Reverse Current	$I_R$	$V_R = -20\text{ V}$	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	$BV_R$	$I_R = -1\ \mu\text{A}$	-60	-35		V	
Forward Voltage Drop	$V_F$	$I_F = 5\text{ mA}$	0.8		1.5		
<b>DYNAMIC</b>							
Reverse Capacitance	$C_R$	$V_R = -5\text{ V}, f = 1\text{ MHz}$	1.5		2	pF	

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