

Low Leakage Pico Amp Diodes



JPAD5 / JPAD10 / JPAD20 / JPAD50 / JPAD100 / JPAD200 SSTPAD5 / SSTPAD10 / SSTPAD20 / SSTPAD50 / SSTPAD100 / SSTPAD200

FEATURES

- Low Leakage 5 pA (JPAD5)
- High Breakdown Voltage -60 V typical
- Low Capacitance 1.5 pf

APPLICATIONS

- High Impedance Diode Switching
- High Dynamic Range Log Amps
- High Isolation Protection Circuits

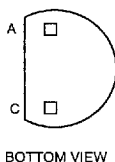
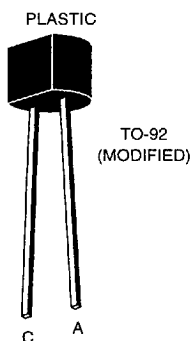
DESCRIPTION

The JPAD series is a low leakage, high speed diode used for input protection circuitry and fast switching. These devices are housed in a plastic TO-92 package for automated high speed assembly. The design and processing of this series results in very low leakage and low capacitance making it an excellent choice vs conventional diodes.

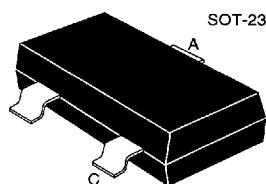
ORDERING INFORMATION

Part	Package	Temperature Range
JPAD5-200	Plastic TO-92	-55°C to +135°C
SSTPAD5-200	Plastic SOT-23	-55°C to +135°C
XPAD5-200	Sorted Chips in Carriers	-55°C to +135°C

PIN CONFIGURATION



BOTTOM VIEW



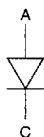
Note: Use only cathode "C" pin.

PRODUCT MARKING (SOT-23)

SSTPAD5	T05
SSTPAD10	T10
SSTPAD20	T20
SSTPAD50	T50
SSTPAD100	T11
SSTPAD200	T21

5007, 5010

SCHEMATIC DIAGRAM



1844322 0000964 109



JPAD5 / JPAD10 / JPAD20 / JPAD50 / JPAD100 / JPAD200
SSTPAD5 / SSTPAD10 / SSTPAD20 / SSTPAD50 / SSTPAD100 / SSTPAD200

ABSOLUTE MAXIMUM RATINGS (25°C)

Forward Current 10 mA
Total Device Dissipation 360 mW
Storage Temperature Range -55°C to 125°C
Lead Temperature (1/16" from case for 10 seconds) 300°C

ELECTRICAL CHARACTERISTICS (25°C Unless otherwise noted)

SYMBOL	CHARACTERISTICS		MIN	TYP	MAX	UNIT	TEST CONDITIONS
STATIC							
I _R	Reverse Current	PAD5			-5	pA	V _R = -20 V
		PAD10			-10		
		PAD20			-20		
		PAD50			-50		
		PAD100			-100		
		PAD200			-200		
B _{VR}	Breakdown Voltage (Reverse)		-35	-60		V	I _R = -1mA
V _F	Forward Voltage Drop			0.8	1.5	V	I _F = 5 mA
DYNAMIC							
C _R	Capacitance			1.5	2.0	pF	V _R = -5 V, f = 1 MHz

NOTE: Product available in surface mount SOT-23 upon request. Contact factory for further information.

1844322 0000965 045