

Low Capacitance Bidirectional TVS/ESD Protection Diode

DESCRIPTION

The SLESD5471S is designed to protect voltage sensitive component from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, portable devices, digital cameras, power supplies and many other portable applications where board space comes at a premium. Also because of its low capacitance, it is suited for use in high frequency designs such as high speed line application.

This device has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge), and EFT (electrical fast transients)

ORDERING INFORMATION

- ♦Device: SLESD5471S
- ♦Package: SOD-523
- ♦Marking: OC
- ♦ Material: Halogen free and RoHS compliant

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- ♦ Packing: Tape & Reel
- ♦Quantity per reel: 3,000pcs

PIN CONFIGURATION

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FEATURES

- ♦ESD per IEC 61000-4-2 ±30 kV (Contact)
- ♦ ESD per IEC 61000-4-2 ±30 kV (Air)
- ♦IEC61000-4-4 (EFT) 40A (5/50ηs)
- ♦Peak power dissipation: 400W (8/20µs)
- ♦Protects one Vcc or data line
- ♦Low clamping voltage
- ♦Working voltages : 5V
- ♦Low leakage current
- ♦Low capacitance

MACHANICAL DATA

- ♦SOD-523 package
- ♦ Flammability Rating: UL 94V-0
- ♦High temperature soldering guaranteed: 260 °C/10s
- Packaging: Tape and Reel
- ♦Reel size: 7 inch

APPLICATIONS

- ♦ Cell Phone Handsets and Accessories
- Microprocessor based equipment
- ♦ Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- ♦Portable Instrumentation
- Networking and Telecom
- ♦ Serial and Parallel Ports
- ♦Peripherals

PACKAGE OUTLINE



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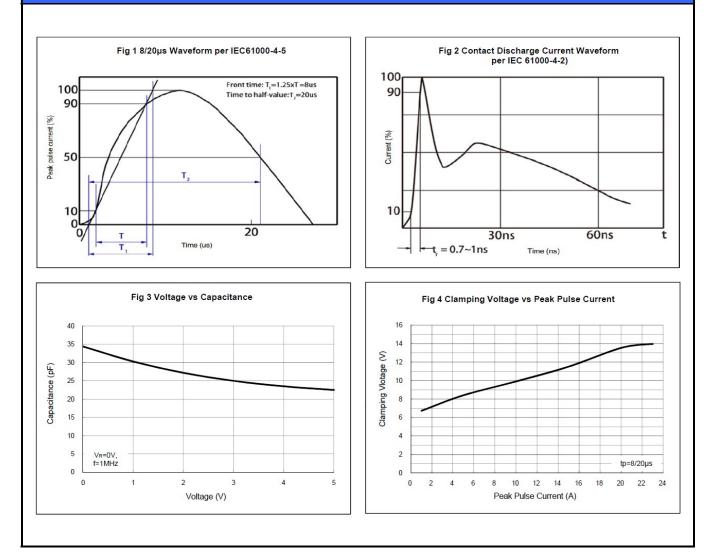


ABSOLUTE MAXIMUM RATING						
Symbol	Parameter	Value	Units			
V _{ESD}	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	±30 ±30	kV			
P _{PP}	Peak Pulse Power (8/20µs)	400	W			
Т _{ОРТ}	Operating Temperature	-55~150	°C			
T _{STG}	Storage Temperature	-55~150	°C			

ELECTRICAL CHARACTERISTICS (Tamb=25°C)								
Symbol	Parameter	Test Condition	Min	Тур	Max	Units		
V_{RWM}	Reverse Working Voltage				5.0	V		
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5.8		7.8	V		
I _R	Reverse Leakage Current	V _{RWM} = 5V			1.0	μA		
V _C	Clamping Voltage	I_{PP} = 1A, t_p = 8/20µs			9.8	V		
V _C	Clamping Voltage	I _{PP} = 20A, t _p = 8/20µs		15	20	V		
CJ	Junction Capacitance	V _R = 0V, f = 1MHz		33	40	pF		



ELECTRICAL CHARACTERISTICS CURVE





SOD-523 PACKAGE OUTLINE DIMENSIONS

