

Innovative Service Around the Globe

DATA SHEET ELECTROSTATIC DISCHARGE PROTECTION DEVICES INDUSTRIAL / CONSUMER UAD92A05L01

RoHS compliant & Halogen free



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Electrostatic Discharged Protection Devices (ESD) Data Sheet

Features

 Transient protection for high-speed data lines IEC61000-4-2 ESD : 25KV (Air) 20KV (contact)

IEC 61000-4-4 (EFT) 40A (5/50 ns) Cable Discharge Event (CDE)

- SOD-923 package
- Package optimized for high-speed lines
- Protects one data, control or power line
- Low capacitance: 0.5pF (Typical)
- Low leakage current: 0.1µA @ V_{RWM} (Typical)
- Low clamping voltage
- Each I/O pin can withstand over 1000 ESD strikes for ±8kV contact discharge
- Flammability Rating: UL 94V-0
- Marking: C



Contact : 20KV Air : 25KV





Applications

- Serial ATA
- PCI Express
- Desktops, Servers and Notebooks
- Cellular Phones
- MDDI Ports
- USB2.0/3.0 Power and Data Line Protection
- Display Ports
- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interfaces (DVI)

Maximum Ratings

Rating	Symbol	Value	Unit	
Peak pulse power (tp=8/20µs waveform)	P _{PP}	50	W	
ESD voltage (Contact discharge)	N	±20	- kV	
ESD voltage (Air discharge)	VESD	±25		
Operating Temperature	TJ	-55~+125	°C	
Storage Temperature	T _{stg}	-55~+150	°C	

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Electrical Characteristics (TJ=25℃)

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Reverse stand-off voltage	V _{RWM}				5.0	V
Reverse breakdown voltage	V_{BR}	I _{BR} =1mA	6.0			V
Reverse leakage current	I _R	V _R =5V		0.1	1.0	μA
Clamping voltage (tp=8/20µs)	Vc	I _{PP} =1A			10.0	V
Peak pulse current (tp=8/20µs)	I _{PP}				4	А
Off state junction capacitance	CJ	0Vdc,f=1MHz		0.85		pF

Typical Characteristics Curves







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Figure 2. Insertion Loss S21 of I/O to GND







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Recommended Soldering Conditions



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Dimensions (SOD-923)



Packaging



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