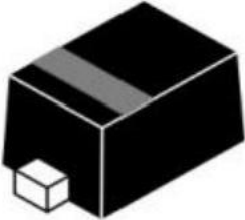




ESD	Features		
<u>SOD923</u>  	<ul style="list-style-type: none"> <li>• Low Capacitance 0.5 pF(Typ)</li> <li>• Reverse stand-off voltage:5V Max</li> <li>• Low leakage current:nA Level</li> <li>• Low Clamping Voltage</li> <li>• Response time is typically&lt;1 ns</li> </ul> IEC61000-4-2 Level 4 ESD Protection		
<u>General description</u> <p>The ESD9L5.0 is designed to protect voltage sensitive components 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.</p>			
<u>Application information</u> <ul style="list-style-type: none"> <li>• 10/100/1000 Mbit/s Ethernet</li> <li>• FireWire</li> <li>• High-speed data lines</li> <li>• Subscriber Identity Module (SIM) card protection</li> <li>Cellular handsets and accessories</li> <li>• Portable electronics</li> <li>• Communication systems</li> <li>• Computers and peripherals</li> <li>• Audio and video equipment</li> <li>• Antenna protection</li> </ul>			
<u>Ordering information</u>			
<u>Device</u>	<u>Package</u>	<u>Marking</u>	<u>Packaging</u>
ESD9L5.0	SOD923	D	8000/Tape&Reel

**Schematic & Pin configuration**

Simplified outline	Graphic symbol
	

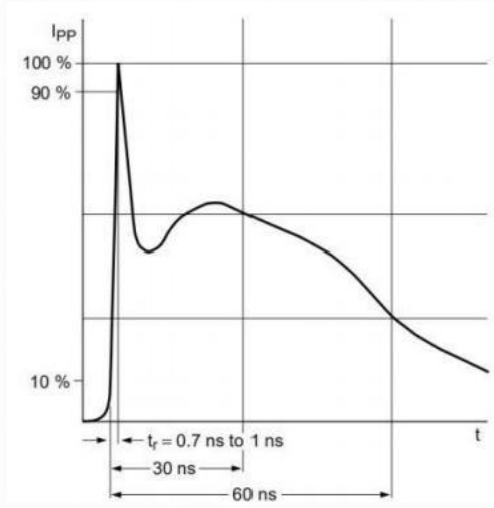
**Maximum Ratings (Top=25 °C, unless otherwise specified)**

Parameter	Symbo	Value	Unit
Peak Pulse Power (tp=8/20 μ s)	PpPM	<b>60</b>	<b>W</b>
Peak Pulse Current (tp=8/20 μ s)	IpPM	<b>4</b>	<b>A</b>
ESD voltage IEC 61000-4-2 (air discharge)	VESD	<b>20</b>	<b>kV</b>
ESD voltage IEC 61000-4-2 (contact discharge)	VESD	<b>15</b>	<b>kV</b>
Maximum lead temperature for soldering during 10s	TL	<b>260</b>	<b>°C</b>
Storage Temperature Range	Tstg	<b>-55 to +150</b>	<b>°C</b>
Operating Temperature Range	Top	<b>-40 to +125</b>	<b>°C</b>
Maximum junction temperature	Tj	<b>150</b>	<b>°C</b>

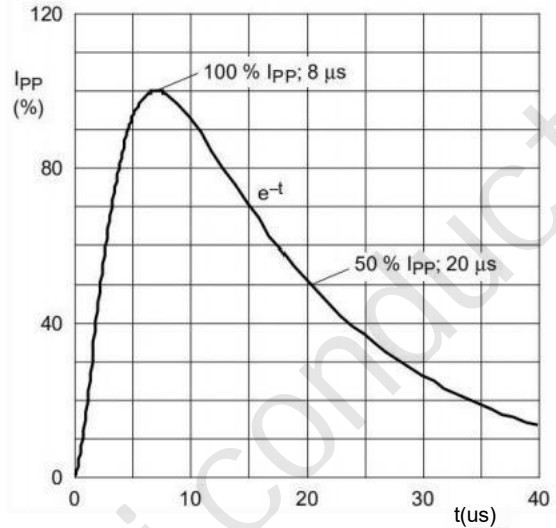
**Electrical Characteristics (Top=25°C, unless otherwise specified)**

Parameter	Symbo	Min	Typ	Max	Unit	Condition
Reverse Working Voltage	VRWM			5.0	<b>V</b>	
Breakdown Voltage	VBR	<b>6.5</b>		9.0	<b>V</b>	Ir=1mA
Leakage Current ILeak	Ik			100	<b>nA</b>	VRwM=5V
Clamping Voltage	Vc			15.0	<b>V</b>	Ipp=4A, Tp=8/20 μ s
Junction Capacitance	Cj		0.5	0.6	<b>pF</b>	VR=0V, f=1MHz

Typical Electrical and Thermal Characteristics (Curves)



IEC61000-4-2 Waveform



IEC 61000-4-5 Waveform(8/20μs pulse)

Package Outline Dimensions

SOD923

SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.74	0.86
B	0.54	0.66
C	0.35	0.45
D	0.14	0.26
K	0.04	0.16
S	0.95	1.10

Soldering Footprint(mm)

