



Micro Commercial Components



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20736 Marilla Street Chatsworth  
Chatsworth, CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## Features

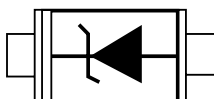
- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- Fast response ,response time less than 1ns.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		$\pm 15$ $\pm 8$	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power(8/20us)	Ppp	100	w

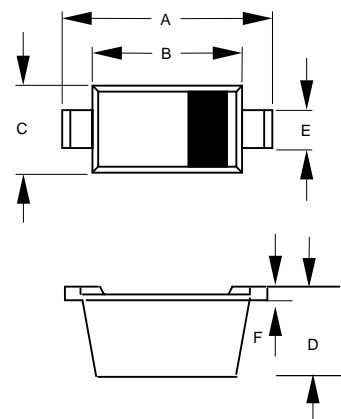
## Pin Configuration-Top View



**ESD7V0D9**

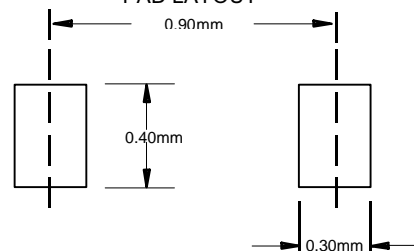
## ESD Protection Device

**SOD-923**



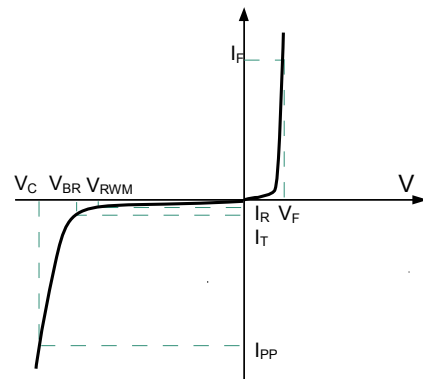
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.037	.041	0.95	1.05	
B	.030	.033	0.75	0.85	
C	.022	.026	0.55	0.65	
D	.014	.017	0.36	0.43	
E	.006	.010	0.15	0.25	
F	.003	.007	0.07	0.17	

### SUGGESTED SOLDER PAD LAYOUT



## ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current
C	Capacitance @ V <sub>R</sub> =0 and f =1MHz



## Electrical characteristics per line @25 °C ( unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Working Voltage	V <sub>RWM</sub>				7	V
Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	8			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =7V			1	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA		0.8		V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A t <sub>p</sub> = 8/20μS			10.0	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =5A t <sub>p</sub> = 8/20μS			14.8	V
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V f = 1MHz		25	30	pF
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =2.5V f = 1MHz		18	25	pF

## Typical Characteristics

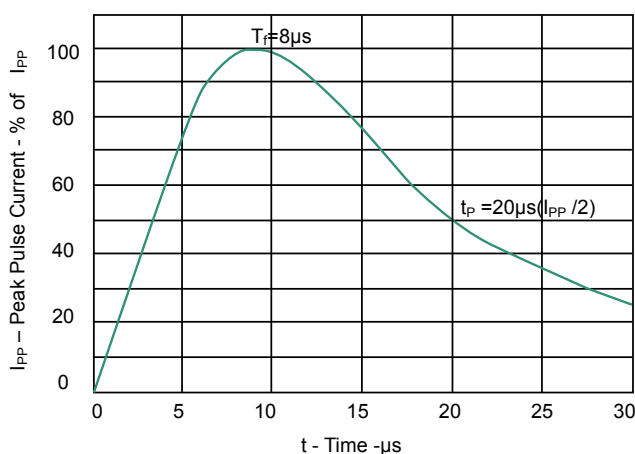


Fig 1.Pulse Waveform

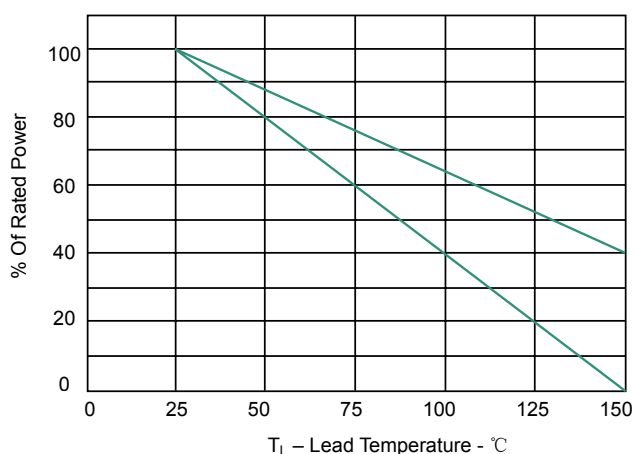


Fig 2.Power Derating Curve



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**Ordering Information :**

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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