

# **Excellent Integrated System Limited**

Stocking Distributor

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Micro Commercial Components (MCC) ESD5V0D9B-TP

For any questions, you can email us directly: sales@integrated-circuit.com

Datasheet of ESD5V0D9B-TP - TVS DIODE 5VWM SOD923 Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



Micro Commercial Components



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## ESD5V0D9B

### 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**

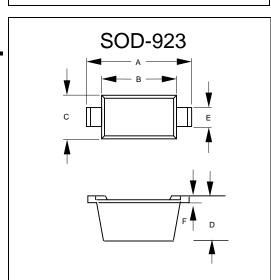
Operating Junction &StorageTemperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air		±15	10.7
Contact		±8	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power(8/20us)	Ppp	80	W

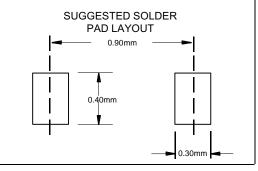
### **Pin Configuration-Top View**



# **ESD Protection Device**



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



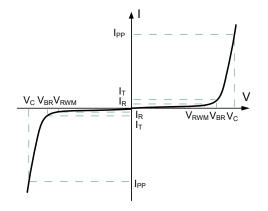
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#### **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter		
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current		
Vc	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>		
$V_{BR}$	Breakdown Voltage @ I <sub>T</sub>		
I <sub>T</sub>	Test Current		
С	Capacitance @V <sub>R</sub> =0 and f =1MHz		



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

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Working Voltage	$V_{RWM}$				5	V
Breakdown Voltage	$V_{BR}$	I <sub>t</sub> =1mA	5.6	6.7	7.8	٧
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V			1	μA
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V f = 1MHz		15		pF

### **Typical Characteristics**

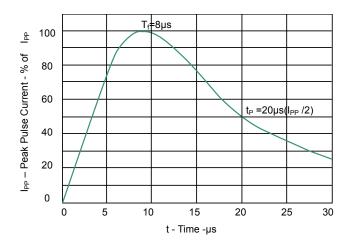


Fig 1.Pulse Waveform

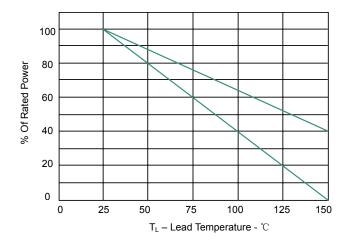


Fig 2.Power Derating Curve

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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

#### \*\*\*IMPORTANT NOTICE\*\*\*

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