

## Features

- 60W peak pulse power per line ( $t_p = 8/20\mu s$ )
- Replacement for MLV(0402)
- Bidirectional configurations
- Response time is typically  $< 1ns$
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to
- IEC61000-4-2(ESD)  $\pm 30KV$ (air),  $\pm 30KV$ (contact);
- IEC61000-4-4 (EFT) 40A (5/50ns)

## Mechanical Characteristics

- SOD923
- Lead Finish:Matte Tin
- UL Flammability Classification Rating 94V-0

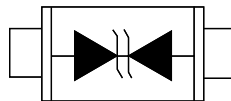
## Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

## Ordering Information

Part Number	Qty per Reel	Reel Size
TPD5V0L1B2S9	10000	7"

## Dimensions and Pin Configuration



**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

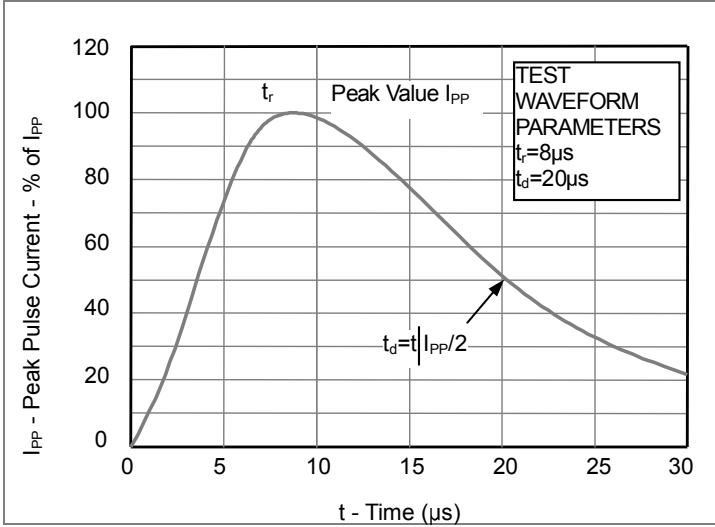
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	60	W
Peak Pulse Current (8/20μs)	Ipp	7	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

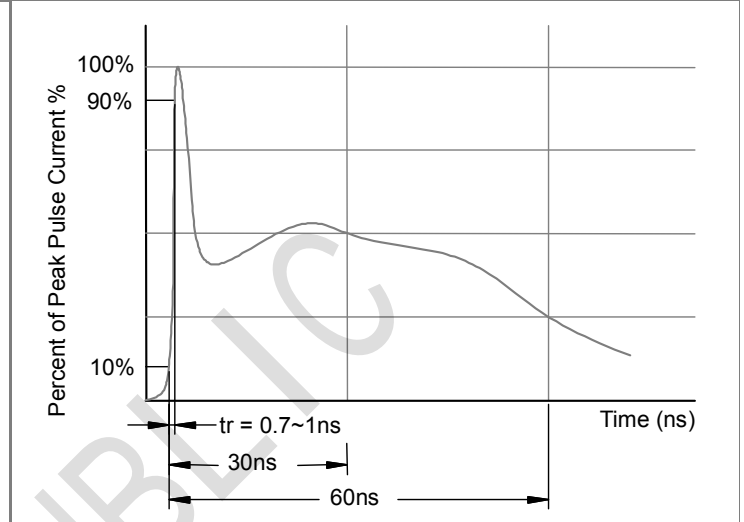
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Breakdown Voltage	VBR	6		8.5	V	IT = 1mA
Reverse Leakage Current	IR			0.2	μA	VRWM = 15V
Clamping Voltage	VC			7	V	I <sub>PP</sub> = 1A (8 x 20μs pulse)
Clamping Voltage	VC			9	V	I <sub>PP</sub> = 7A (8 x 20μs pulse)
Junction Capacitance	CJ		15		pF	VR = 0V, f = 1MHz

**PROTECTION PRODUCTS**  
Typical characteristics

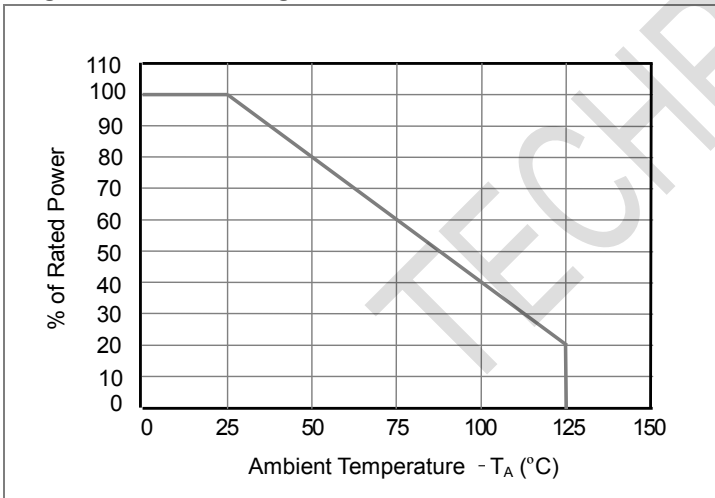
**Fig1. 8/20 $\mu$ s Pulse Waveform**



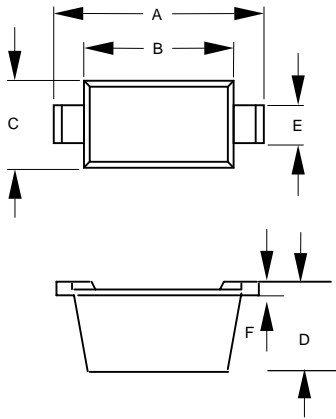
**Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)**



**Fig3. Power Derating Curve**

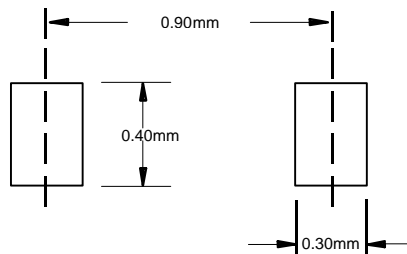


**Outline Drawing - SOD-923**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	

**Land Pattern - SOD-923**



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