

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

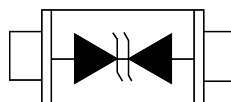
Applications

- 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 _{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	VC			9	V	I _{PP} = 7A (8 x 20μs pulse)
Junction Capacitance	CJ		15		pF	VR = 0V, f = 1MHz

PROTECTION PRODUCTS
Typical characteristics

Fig1. 8/20 μ s Pulse Waveform

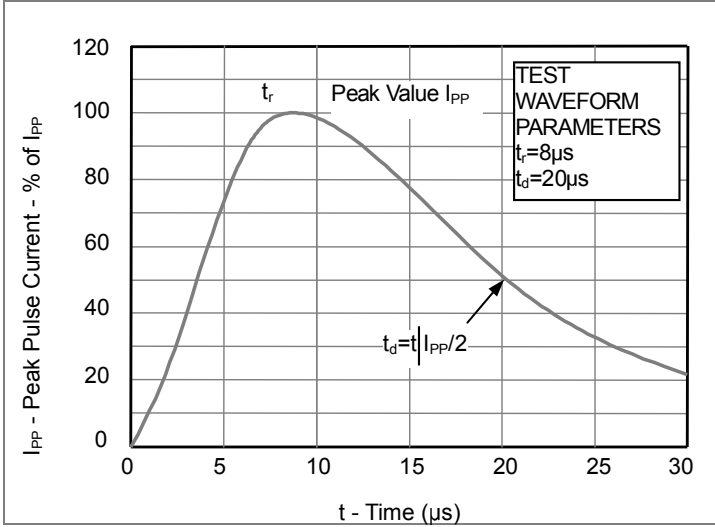


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

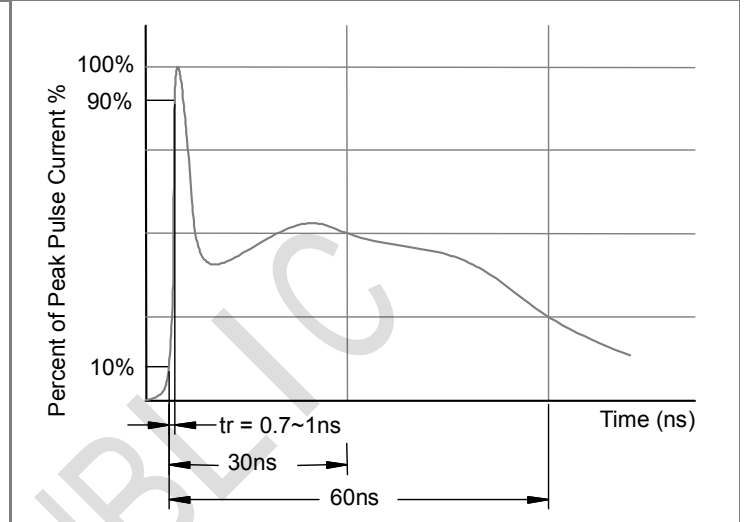
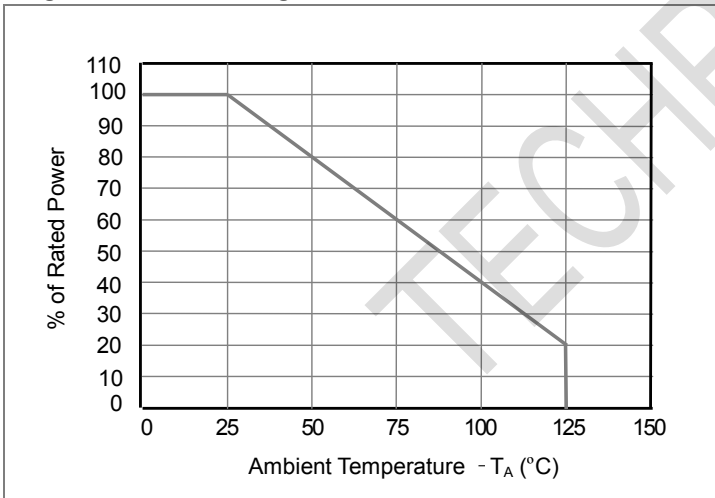
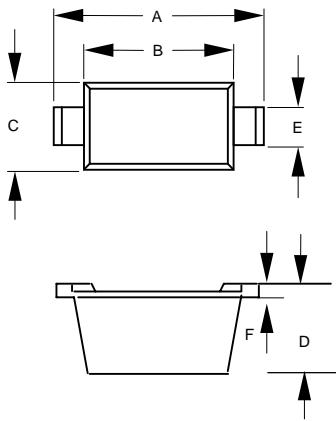


Fig3. Power Derating Curve



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

