



FEATURES

- 40W peak pulse power per line ($t_P = 8/20\mu s$)
- SOD-923 package
- Replacement for MLV(0402)
- Bidirectional configurations
- Response time is typically $< 1ns$
- High ESD protection
- Low clamping voltage
- RoHS compliant

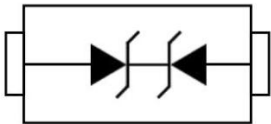
MACHANICAL DATA

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260℃
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 μm
- Pin flatness: $\leq 3mil$

APPLICATIONS

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

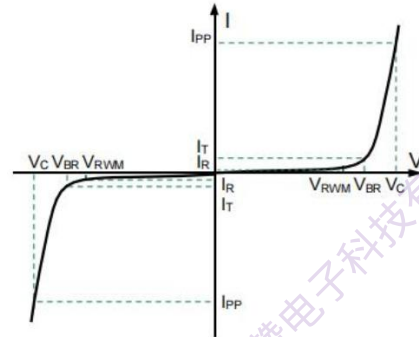
Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
 SOD-923		



Electronics Parameter

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
P_{PP}	Peak Pulse Power
C_J	Junction Capacitance
I_F	Forward Current
V_F	Forward Voltage @ I_F



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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Peak Reverse Working Voltage	V_{RWM}			3.3		V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	5.6	6.7	7.8	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$ $T=25^\circ\text{C}$			1.0	A
Clamping Voltage	V_C	$I_{PP}=1\text{A}$			9	V
Junction Capacitance	C_J	$V_R=0\text{V}$ $f = 1\text{MHz}$		0.5		F

Absolute maximum rating@ 25 °C

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{pp}	40	W
Operating Temperature	T_J	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

Typical Characteristics

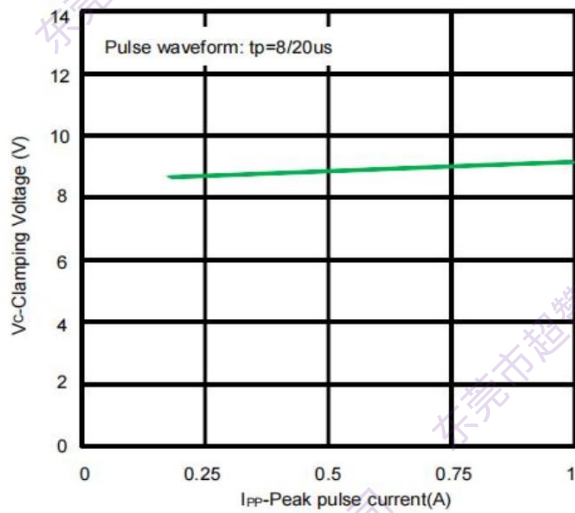
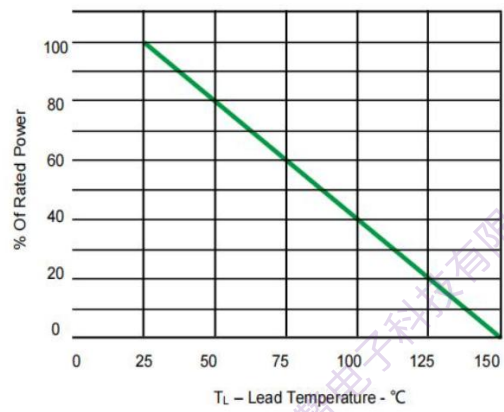
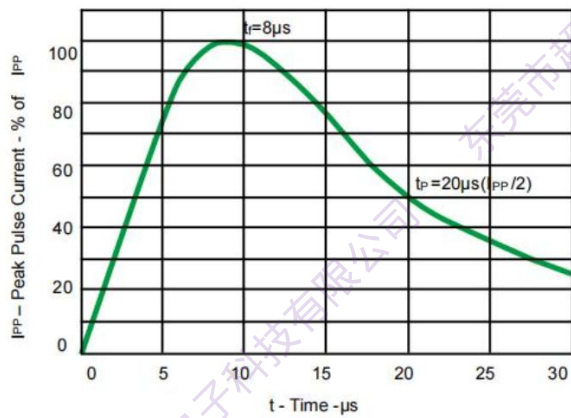


Fig 3. Clamping voltage vs. Peak pulse current

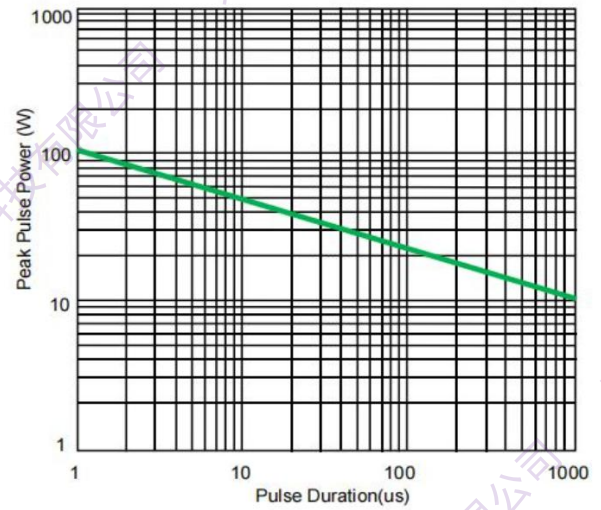
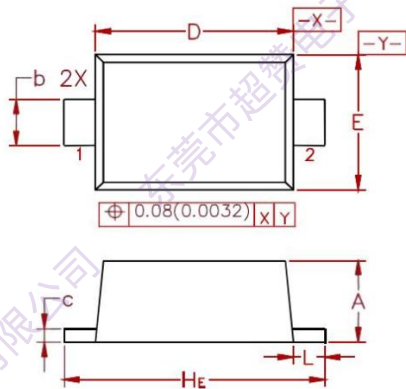


Fig 4. Non Repetitive Peak Pulse Power vs. Pulse time

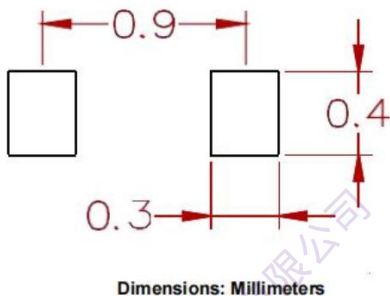


PACKAGE MECHANICAL DATA



Dim	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	0.36	0.40	0.43	0.014	0.016	0.017
b	0.15	0.20	0.25	0.006	0.008	0.010
c	0.07	0.12	0.17	0.003	0.005	0.007
D	0.75	0.80	0.85	0.030	0.031	0.033
E	0.55	0.60	0.65	0.022	0.024	0.026
HE	0.95	1.00	1.05	0.037	0.039	0.041
L	0.05	0.10	0.15	0.002	0.004	0.006

Suggested Pad Layout



REEL SPECIFICATION

P/N	PKG	QTY
ESD9R3.3ST5G	SOD-923	8000