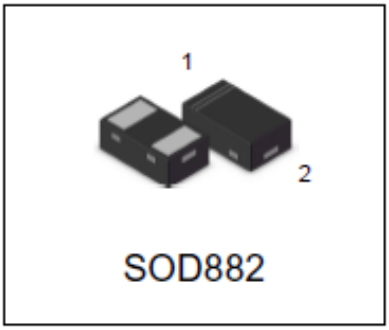
ESD Protection –ESD24VD8B

Description

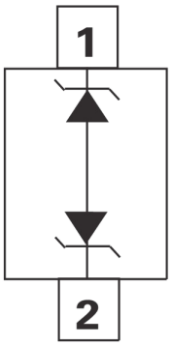
The ESD24VD8B in a SOD-882 package and will protect bidirectional line. These devices are designed to replace multilayer varistors (MLVs) in portable applications such as cell phones, notebook computers, and PDA’s. They offer superior electrical characteristics such as lower clamping voltage and no device degradation when compared to MLVs, The ESD24VD8B are designed to protect sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD),and other voltage induced transient events.



Feature

- Case : SOD882 package
- Extremely low capacitance
- Low Leakage current
- Response Time is Typically < 1.0 ns
- IEC61000 4 2 Level 4 ESD Protection
- Bi-directional ESD protection
- The best ESD protection for high frequency, low voltage applications

Schematic & PIN Configuration



Applications

- Display Port Interface (DP)
- High Definition Multi-Media Interface (HDMI)
- Digital cameras
- Power supplies

Absolute Maximum Ratings

Parameter	Symbol	Value	Units
IEC61000-4-2 (Contact)	V_{ESD}	15	kV
IEC61000-4-2 (Air)	V_{ESD}	8	kV
Lead Soldering Temperature	T_L	260 (10 sec)	° C
Operating Temperature	T_J	-40 to 90	° C
Storage Temperature Range	T_{STG}	-55 to 125	° C

Electrical Characteristics (T =25° C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	VRWM				24	V
Reverse Leakage Current	IR	DC 24V shall be applied on component			1	μ A
Trigger voltage	V_T	IEC61000-4-2 8KV contact discharge		350		V
Clamping Voltage	V_C	IEC61000-4-2 8KV contact discharge		60		V
Junction Capacitance	CJ	VR=0V, f = 1MHz		1		pF

Rating & Characteristic Curves

Figure 1 - Electrical Parameter

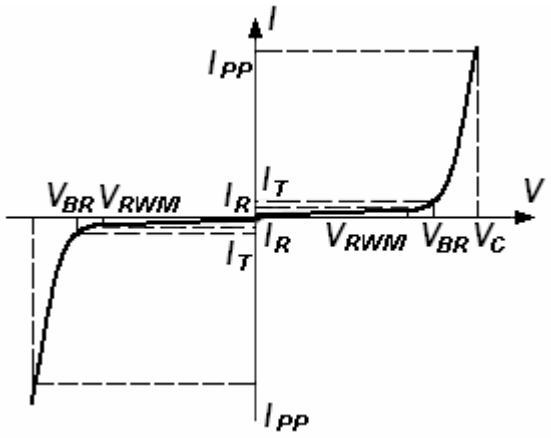
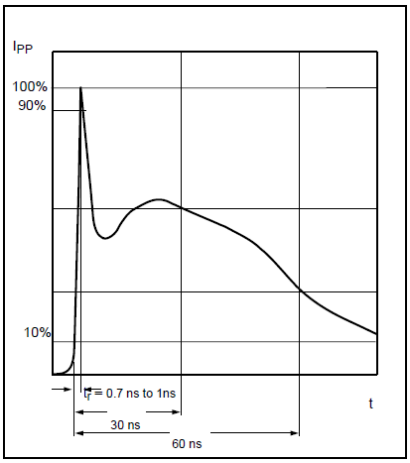
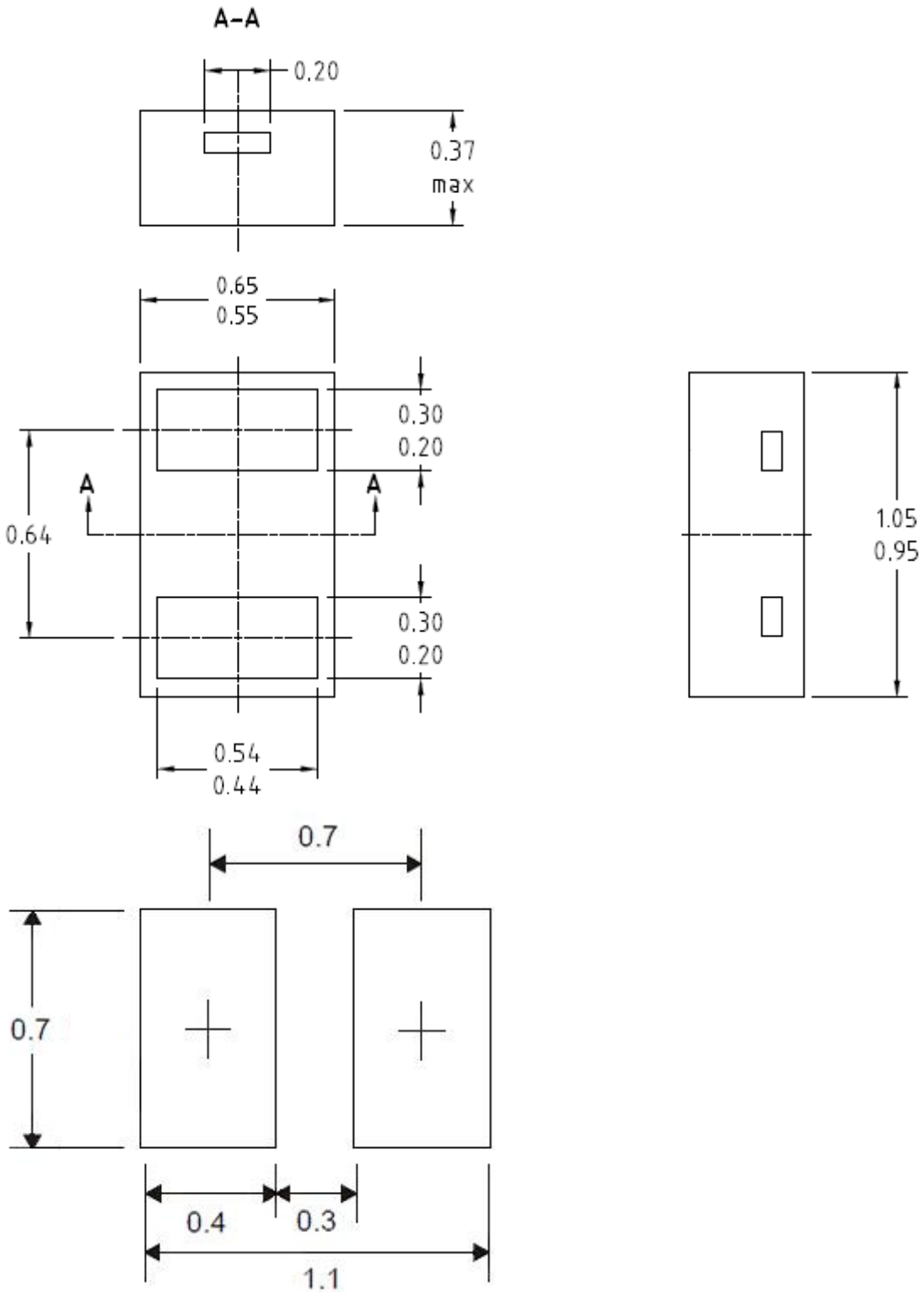


Figure 2- ESD Waveform



PACKAGE OUTLINE DIMENSIONS in millimeters :**SOD882**



Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.