

TVS Diodes

ESDALC6V1

■ Features

- Equivalent to 0402 package
- 120W peak pulse power
- Small package for use in portable electronics
- Standoff voltage : 5V
- Low leakage current

Complies with the following standards

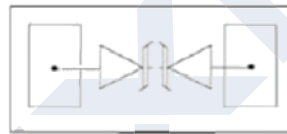
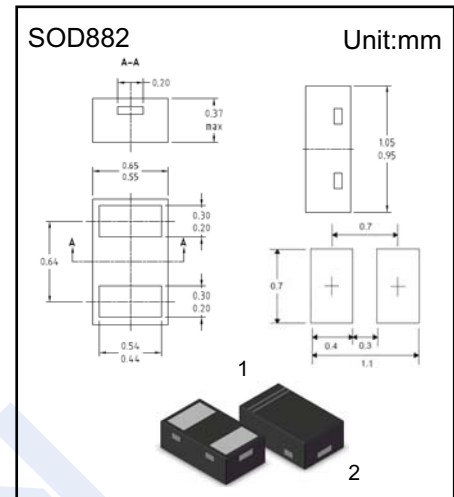
IEC61000-4-2

Level 4 15 kV (air discharge)

8 kV(contact discharge)

MIL STD 883E - Method 3015-7 Class 3

25 kV HBM (Human Body Model)



■ Absolute Maximum Ratings

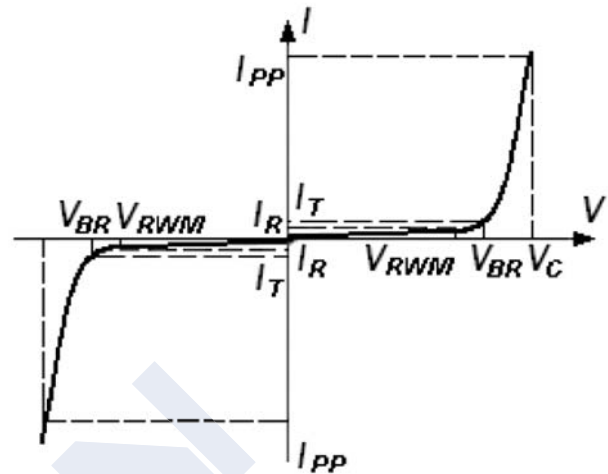
Parameter	Symbol	Value	Unit
IEC 61000-4-2(ESD) Contact		8	KV
Peak Pulse Power	PPK	120	W
Peak Pulse Power	IPP	12	A
Junction Temperature	T _j	150	°C
Storage Temperature range	T _{stg}	-55 to +150	

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■ Electrical Characteristics

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



■ Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted, $V_F=0.9\text{V}$ Max. @ $I_F=10\text{mA}$ for all types)

Part Numbers	VBR			I_T	V_{RWM}	I_R	C
	Min.	Typ.	Max.				
	V	V	V				
ESDALC6V1	6.1	6.6	7.2	1	5.0	1	10

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■ Typical Characteristics

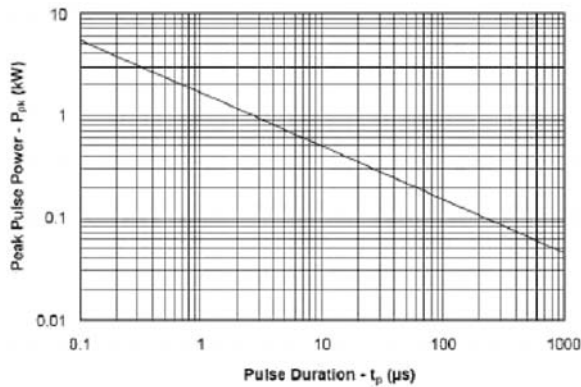


Figure 1. Non-Repetitive Peak Pulse Power versus Pulse Time

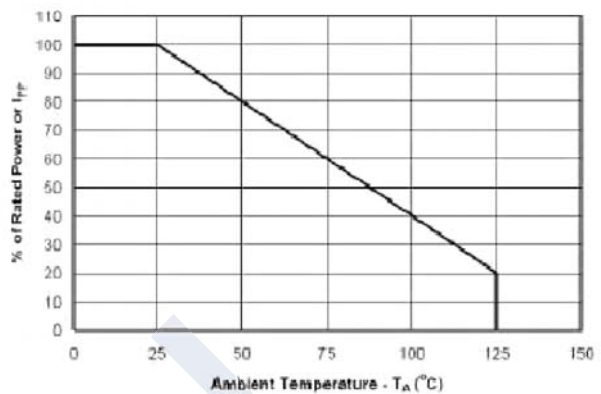


Fig 2. Power Derating Curve

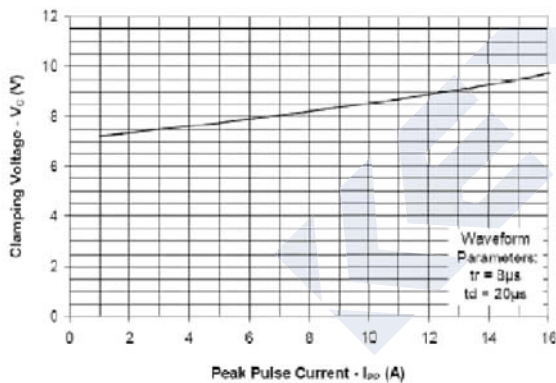


Figure 3. Clamping Voltage vs. Peak Pulse Current

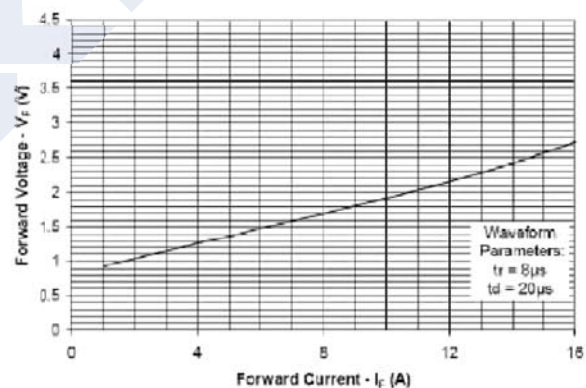


Figure 4. Forward Voltage vs. Forward Current

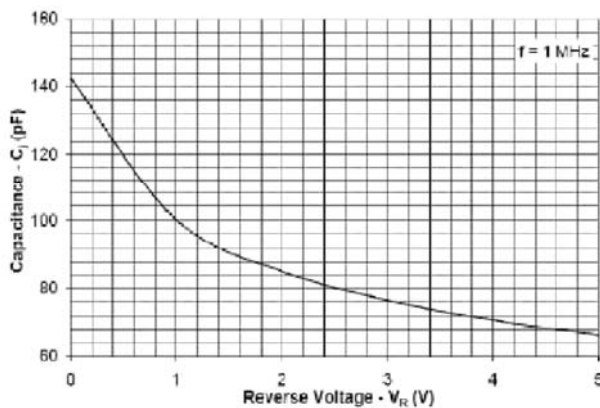


Figure 5. Junction Capacitance vs. Reverse Voltage

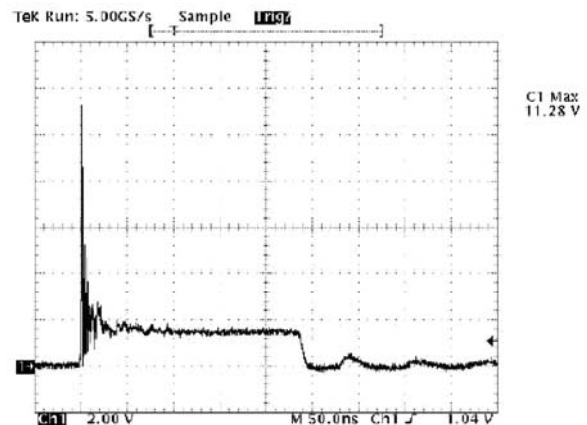


Fig 6. ESD Clamping (8kV Contact per IEC 61000-4-2)