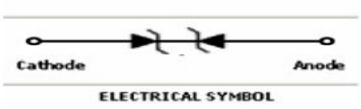
ESD8D5V0C
Transient Voltage Suppressors ESD Protection Diode

General description
Silicon Diode in a SOD-882 Plastic Package.

Green Product

FEATURES
- Capacitance Typ. 15pF
- Small Body Outline Dimensions
- Low Leakage Current
- ESD Rating of Class 3 (>16kV) per Human Body Model
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish



Absolute Maximum Ratings (T$_A$ = 25°C unless otherwise noted)

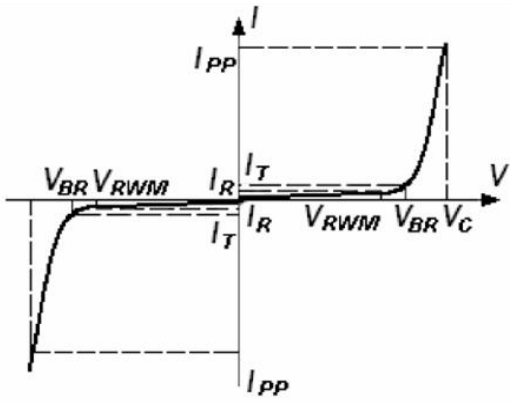
Symbol	Parameter	Value	Units
PD	Total Power Dissipation on FR-5 Broad	150	mW
T_L	Max Lead Solder Temperature range (10 Second Duration)	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{OPR}	Max operation Temperature Range	+125	°C
ESD	IEC61000-4-2 Air Discharge Contact Discharge	±25 ±25	KV

Device Marking:

Device Type	Marking	Shipping
ESD8D5V0C	C *	10,000/Reel

Electrical Parameter

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



V1, Dec,2022

Electrical Characteristics (T$_A$ = 25°C unless otherwise noted)

Device Type	V_{RWM} (Volts)	I_R @ V_{RWM} (μA)	V_{BR} @ I_T (Note 1) (Volts)		I_T (mA)	I_{PP+} (A)	V_C @ Max I_{PP+} (Volts)	P_{PK+} (W)	C @ V_R = 0V, f = 1MHz (pF)
	Max	Max	Min	Max		Max	Max	Max	Typ.
ESD8D5V0C	5.0	0.5	5.6	---	1.0	5	12	85	15

ESD8D5V0C

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

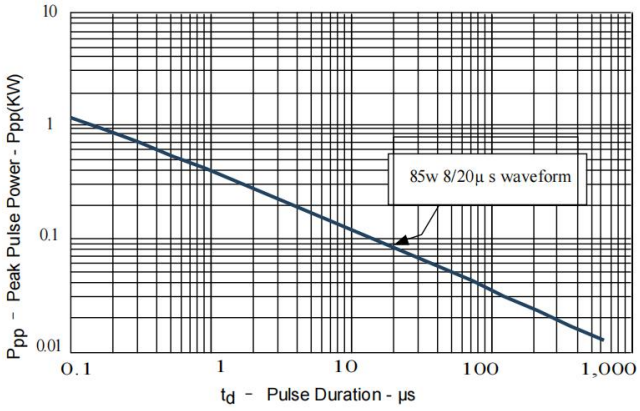


Fig.2 Clamping Voltage vs.Ipp

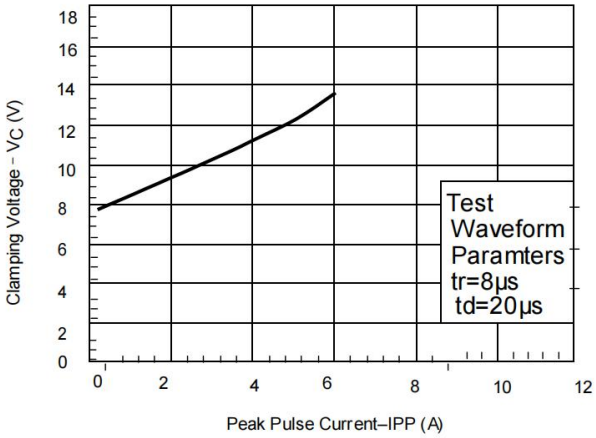


Fig.3 Pulse Waveform-8/20μs

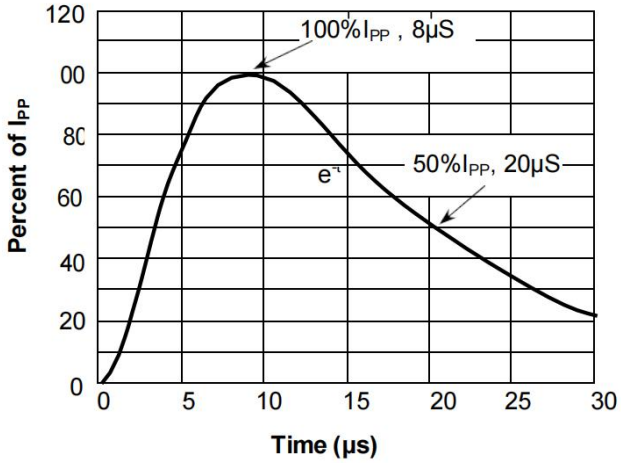
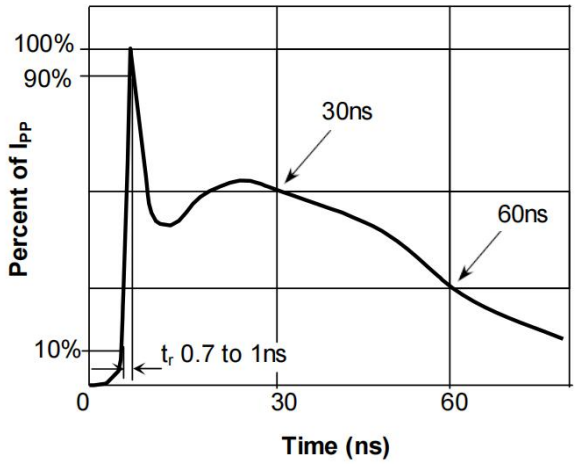


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



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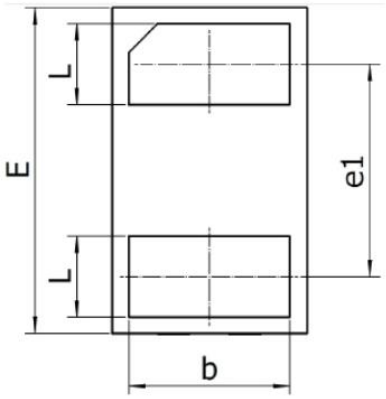
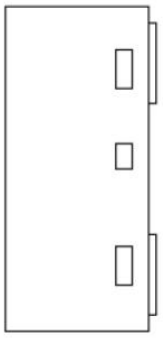
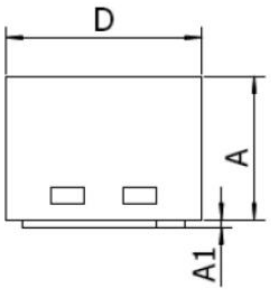
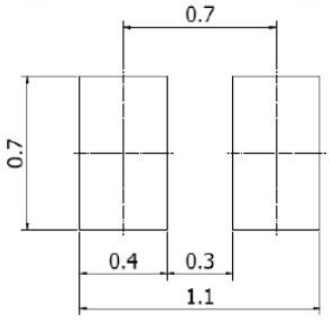
SOD-882 Package Outline







Typical Soldering Pattern(mm):



DIM	MILLIMETERS	
	MIN	MAX
A	0.40	0.55
A1	--	0.05
b	0.45	0.55
D	0.55	0.65
E	0.95	1.05
e1	Typ.0.65	
L	0.20	0.30

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