

# ESD8D5V0C

## ESD8D5V0C Transient Voltage Suppressors ESD Protection Diode

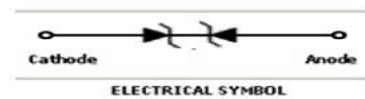
### General description

Silicon Diode in a SOD-882 Plastic Package.

### 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

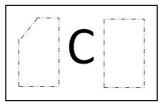
### Green Product



**Absolute Maximum Ratings** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

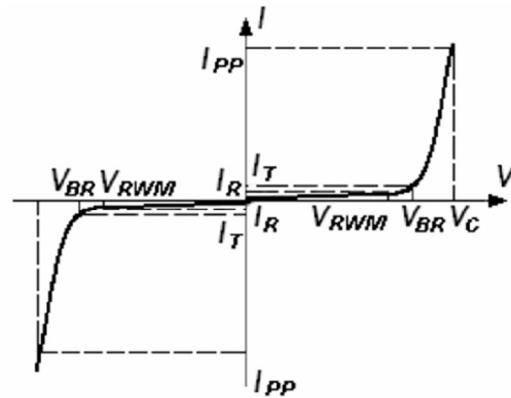
Symbol	Parameter	Value	Units
PD	Total Power Dissipation on FR-5 Broad	150	mW
$T_L$	Max Lead Solder Temperature range (10 Second Duration)	260	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_{opr}$	Max operation Temperature Range	+125	$^\circ\text{C}$
ESD	IEC61000-4-2 Air Discharge	$\pm 20$	KV
	Contact Discharge	$\pm 25$	

### Device Marking:

Device Type	Marking	Shipping
ESD8D5V0C		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 @ $I_T$



**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Device Type	$V_{RWM}$ (Volts)	$I_R @ V_{RWM}$ ( $\mu\text{A}$ )	$V_{BR} @ I_T$ (Note 1) (Volts)		$I_T$ (mA)	$I_{PP+}$ (A)	$V_C @ \text{Max } I_{PP+}$ (Volts)	$P_{PK+}$ (W)	$C @$ $V_R = 0V, f = 1\text{MHz}$ (pF)
	Max	Max	Min	Max					Typ.
ESD8D5V0C	5.0	0.5	5.6	---	1.0	5	12	60	15

## SURGE CURRENT WAVEFORM:

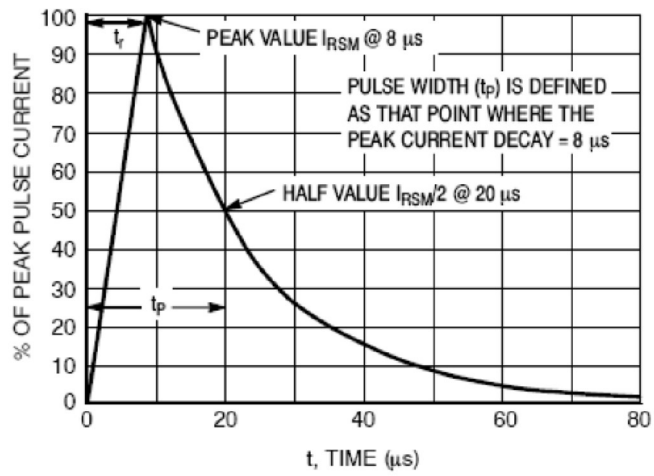
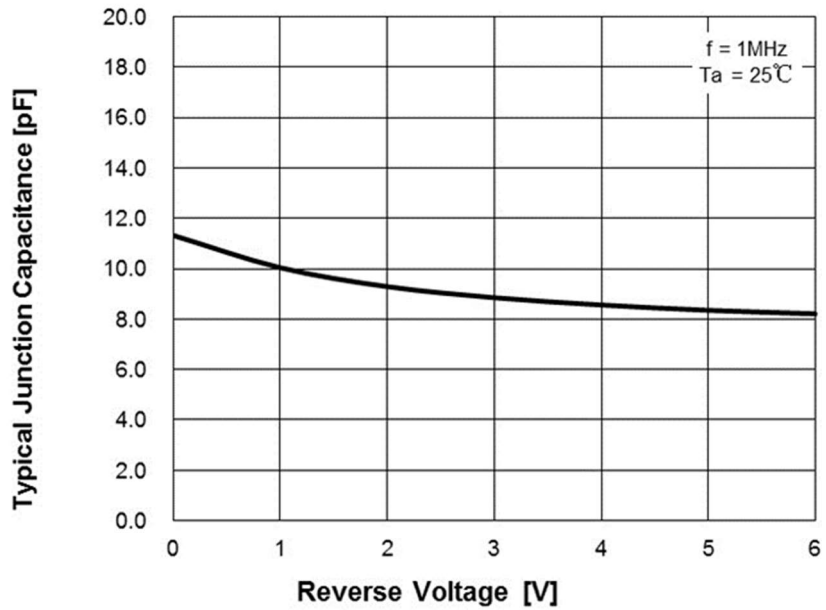


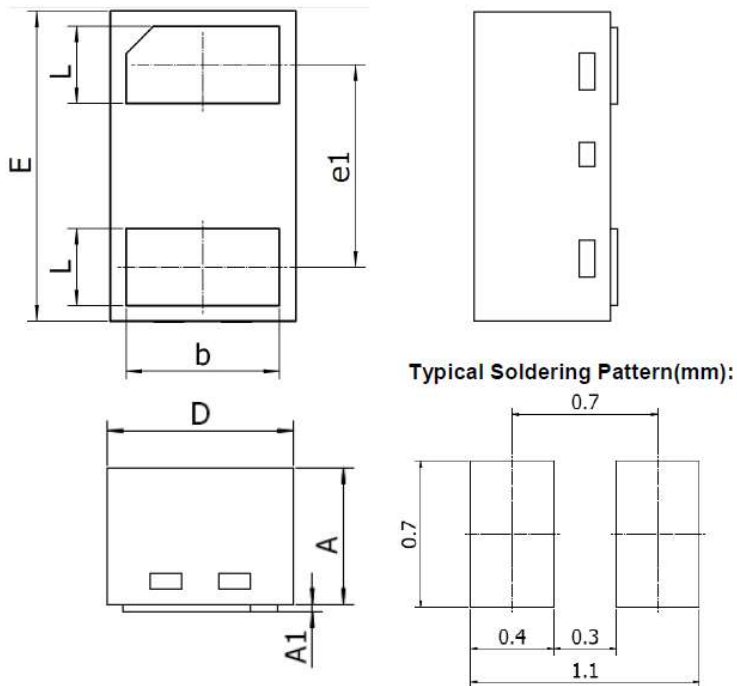
Figure 1. 8 x 20 µs Pulse Waveform

## CAPACITANCE CURVE:



# ESD8D5V0C

## SOD882 Package Outline



Typical Soldering Pattern(mm):

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.46	0.50	0.018	0.020
A1	---	0.03	---	0.001
b	0.45	0.55	0.018	0.022
D	0.55	0.65	0.022	0.026
E	0.95	1.05	0.037	0.041
e1	Typ. 0.65		Typ. 0.026	
L	0.20	0.30	0.008	0.012

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