

ESD8D3V3CA

ESD8D3V3CA Transient Voltage Suppressors ESD Protection Diode

General description

Silicon Diode in a SOD882 Plastic Package.

FEATURES

- Capacitance Max. 15 pF
- Small Body Outline Dimensions
- Low Leakage Current
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- MSL1

Package Outline



SOD882 Package



Device Marking:

Device Type	Marking
ESD8D3V3CA	F3 or BK

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

Symbol	Parameter	Value	Units
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_{OP}	Max operation Temperature Range	125	$^\circ\text{C}$
ESD	IEC61000-4-4 (EFT 5/50ns)	40	A
ESD	IEC61000-4-2 Air Discharge Contact Discharge	± 30 ± 30	KV

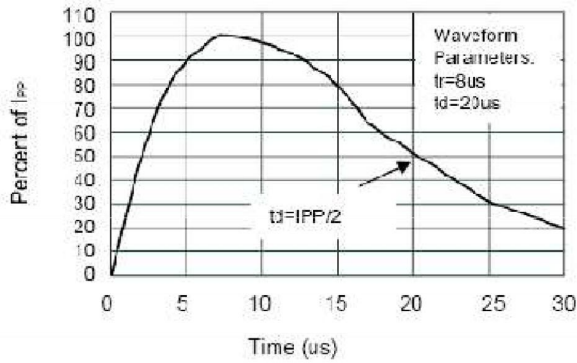
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 30 ± 30	kV
P_{PP}	Peak Pulse Power (8/20 μs)	84	W
T_{OPT}	Operating Temperature	-55/+125	C
T_{STG}	Storage Temperature	-55/+150	C

ABSOLUTE MAXIMUM RATING

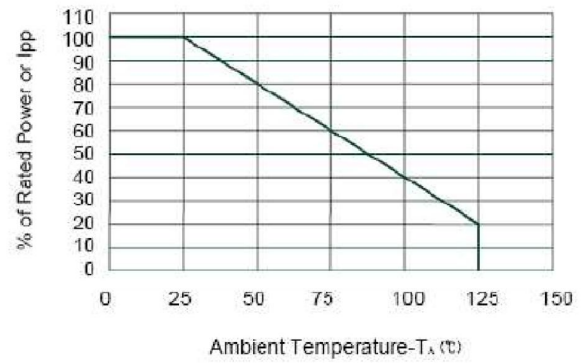
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	3.6			V
I_R	Reverse Leakage Current	$V_{RWM} = 3.3\text{V}$			0.5	μA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$		4.4	5.6	V
V_C	Clamping Voltage	$I_{PPmax} = 7\text{A}$, $t_p = 8/20\mu\text{s}$		7.0	12.0	V
C_J	Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$		13	15	pF

WAVEFORM CURVE:

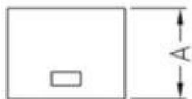
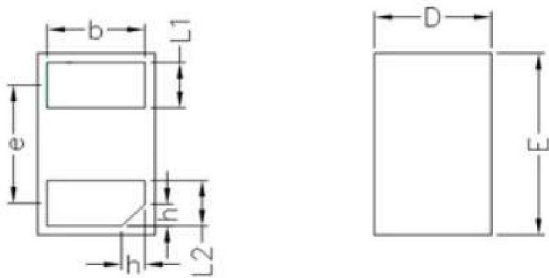


Pulse Waveform



Power Derating Curve

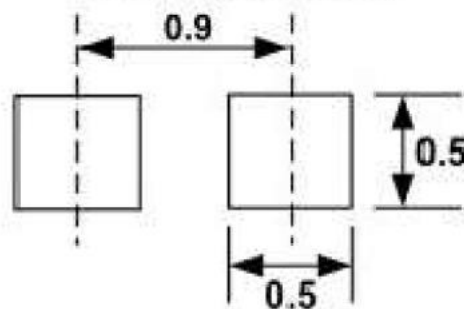
SOD882 Package Outline



Unit: mm

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
b	0.45	0.50	0.55
e	0.65BSC		
A	0.45	0.50	0.55
h	0.07	0.12	0.17

Dimension: Millimeter
 (Stencil thickness: 0.1)



Soldering Footprint

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