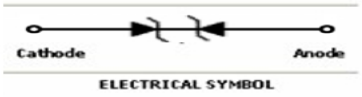
ESD8LM5V0C
Transient Voltage Suppressors ESD Protection Diode

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

Green Product


SOD882 Package

FEATURES
- Capacitance Typ. 3.5pF
- Low Clamping voltage.
- Small Body Outline Dimensions
- Low Leakage Current
- Response Time is Typically < 1ns
- ESD Rating of Class 3 (>16kV) per Human Body Model
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish



ELECTRICAL SYMBOL

Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

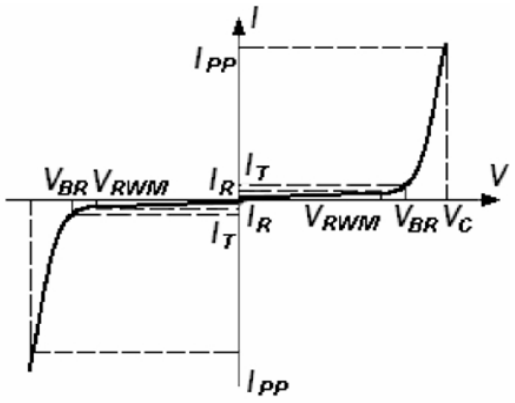
Symbol	Parameter	Value	Units
PD	Total Power Dissipation on FR-5 Broad	150	mW
T_L	Max Lead Solder Temperature range (10 Second Duration)	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_J	Junction Temperature	+125	°C
ESD	IEC61000-4-2 Air Discharge Contact Discharge	±15 ±12	KV
EFT	IEC61000-4-4	40	A
ESD	Per Human Body Model	16	KV

Device Marking:

Device Type	Marking	Shipping
ESD8LM5V0C	Q5 or 5CU	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°C unless otherwise noted)

Device Type	V_{RWM} (Volts)	I_R @ V_{RWM} (µA)	V_{BR} @ I_T (Note 1) (Volts)		I_T (mA)	V_C @ Max I_{PP} (Volts)	I_{PP}* (A)	C @ V_R = 0V, f = 1MHz (pF)
	Max	**Max**	**Min**	**Max**		**Max**	**Max**	**Typ.**
ESD8LM5V0C	5.0	1	5.6	11.0	1.0	13	3.5	3.5

* Surge current waveform per Figure 1.
Note 1: VBR is measured with a pulse test current IT at an ambient temperature of 25°C.

SURGE CURRENT WAVEFORM：

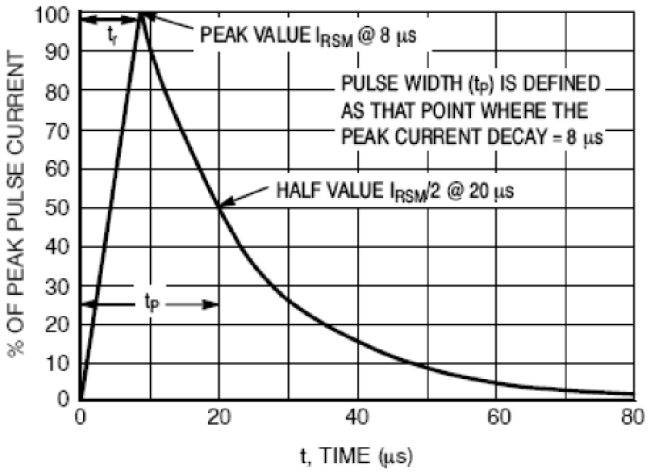
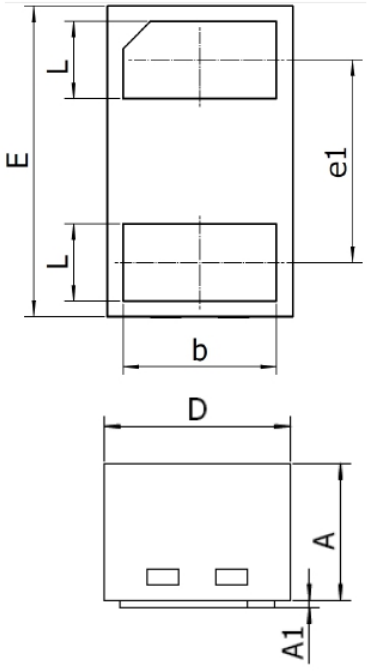
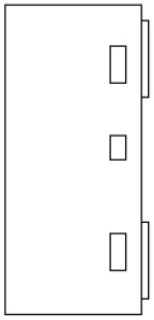


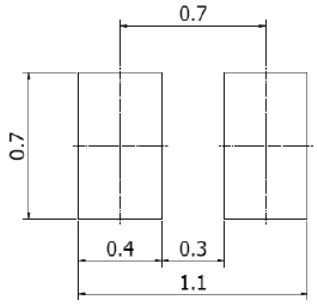
Figure 1. 8 x 20 μs Pulse Waveform

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

Important Notice and Disclaimer

DOESHARE has used reasonable care in preparing the information included in this document, but DOESHARE does not warrant that such information is error free. DOESHARE assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

DOESHARE no warranty, representation or guarantee regarding the documents, circuits and products specification, DOESHARE reservation rights to make changes for any documents, products, circuits and specifications at any time without notice.

Purchasers are solely responsible for the choice, selection and use of the DOESHARE products and services described herein, and DOESHARE assumes no liability whatsoever relating to the choice, selection or use of the products and services described herein.

No license, express or implied, by implication or otherwise under any intellectual property rights of DOESHARE.

Resale of DOESHARE products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by DOESHARE for the DOESHARE product or service described herein and shall not create or extend in any manner whatsoever, any liability of DOESHARE.