

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

FrelTec

ESD
SOD882

SOD882

SPECIFICATION

631	ESD8D5V0Cx	SD82	E10
Type	Type	Package	Packing
631: ESD	ESD8D5V0C	SOD882	E10: Embossed tape and reel for 10k pc (7'Reel)

All products according to RoHS (2015/863/EU)

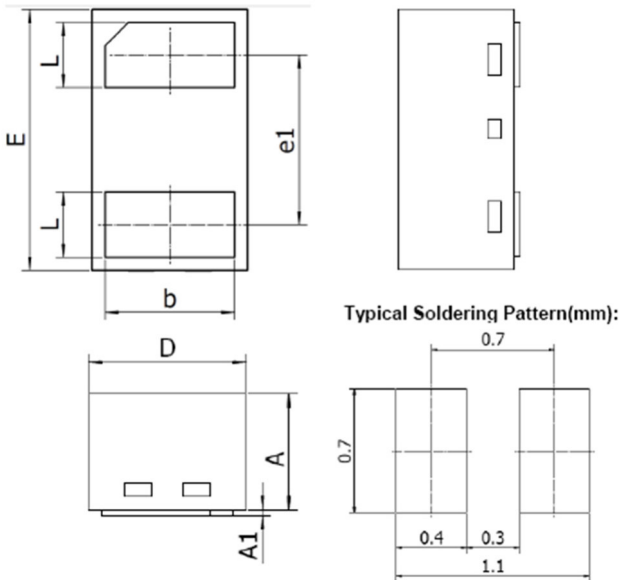
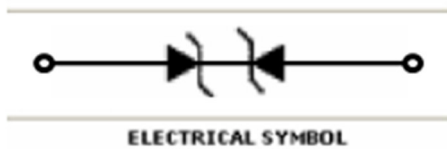


PACKAGE OUTLINE

Green Product



SOD882 Package



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

Symbol	Parameter	Value	Units
P_D	Total Power Dissipation on FR-5 Board	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}	Maximum Operating Temperature Range	+125	$^\circ\text{C}$
ESD	IEC61000-4-2 Air discharge Contact discharge	± 20 ± 25	KV

These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics $T_A = 25^\circ\text{C}$ 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)	$PPK+$ (W)	$C @$ $V_R = 0V, f = 1\text{MHz}$ (pF)
	Max	Max	Min	Max		Max	Max	Max	Typ,
ESD8D5V0C	5,0	0,5	5,6	--	1,0	5	12	60	15

+Surge current waveform per Figure1.

Note 1: V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C

SURGE CURRENT WAVEFORM:

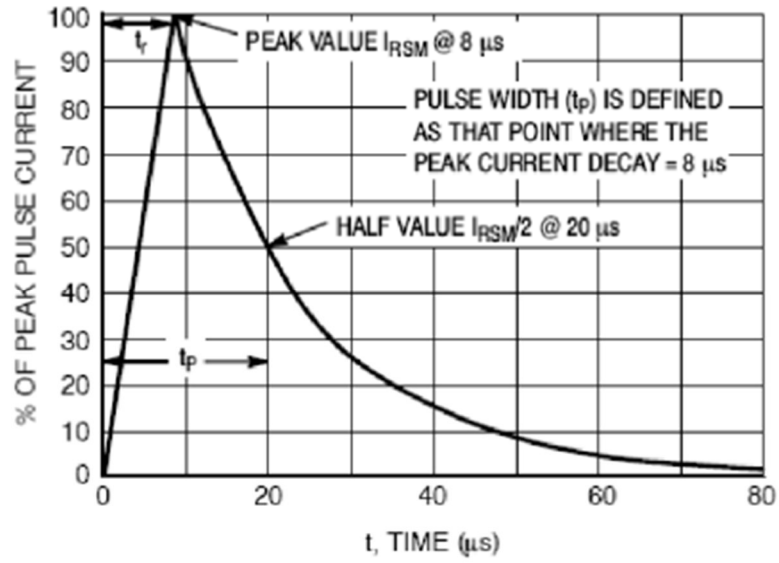
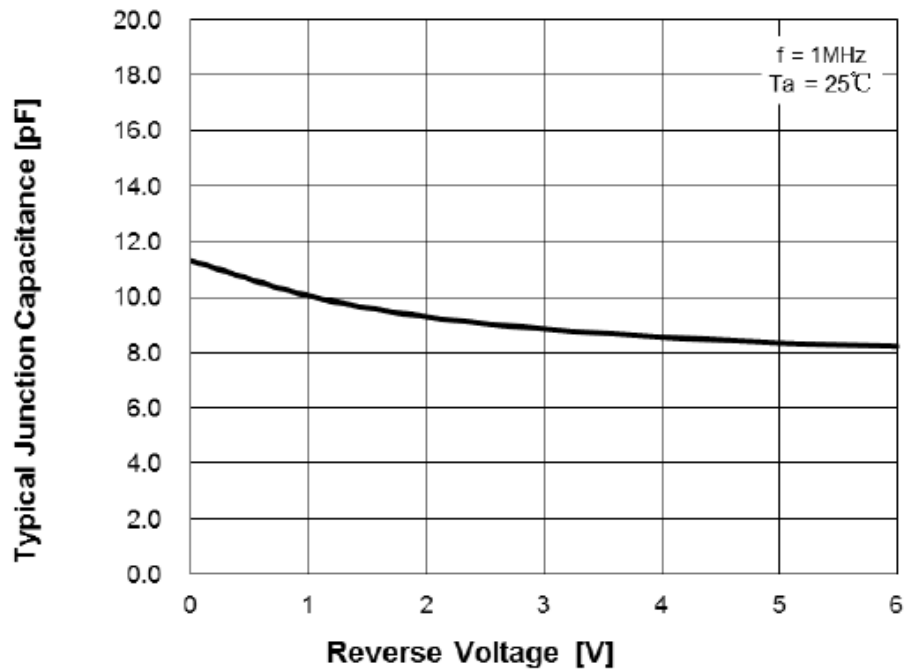


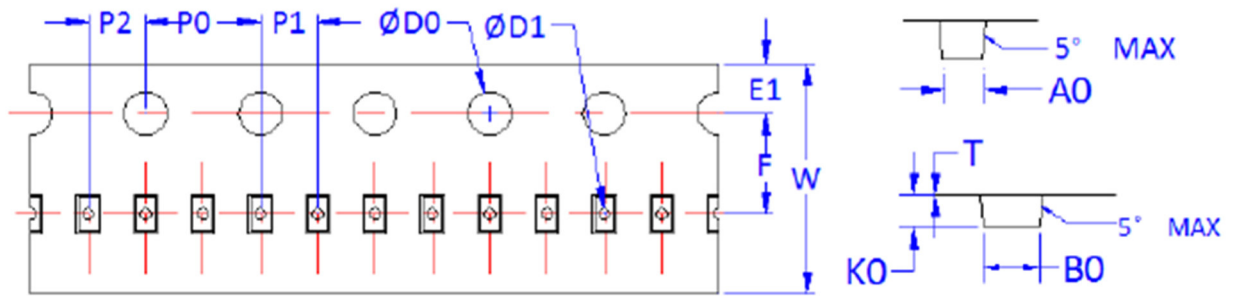
Figure 1. 8 x 20 µs Pulse Waveform

CAPACITANCE CURVE:



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Tape And Reel Package



Unit: mm

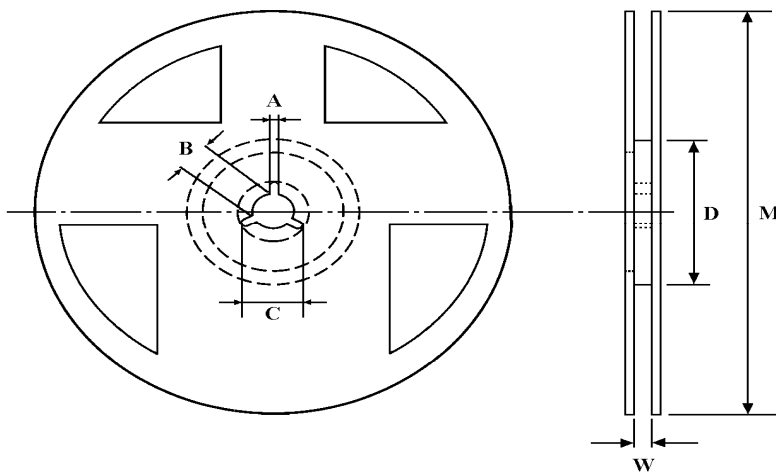
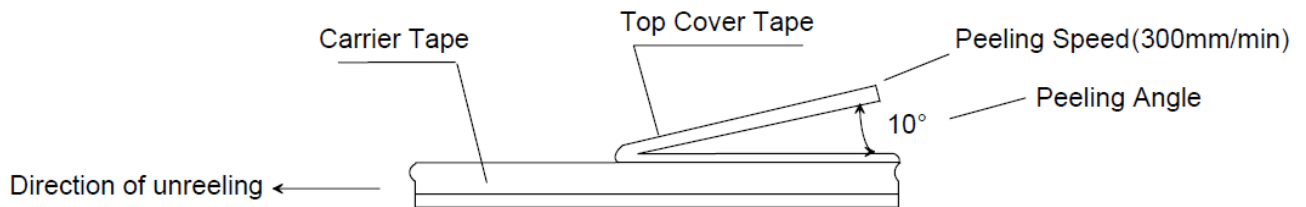
PKG Type	Tape Size	Dim.	W	P1	E1	F	D0	D1	P0	10P0	P2	A0	B0	K0	t
SOD882	8mm	Min.	7.9	1.95	1.65	3.45	1.5	0.35	3.9	39.8	1.95	0.64	1.14	0.61	0.23
		Max.	8.3	2.05	1.85	3.55	1.6	0.45	4.1	40.2	2.05	0.74	1.24	0.71	0.27

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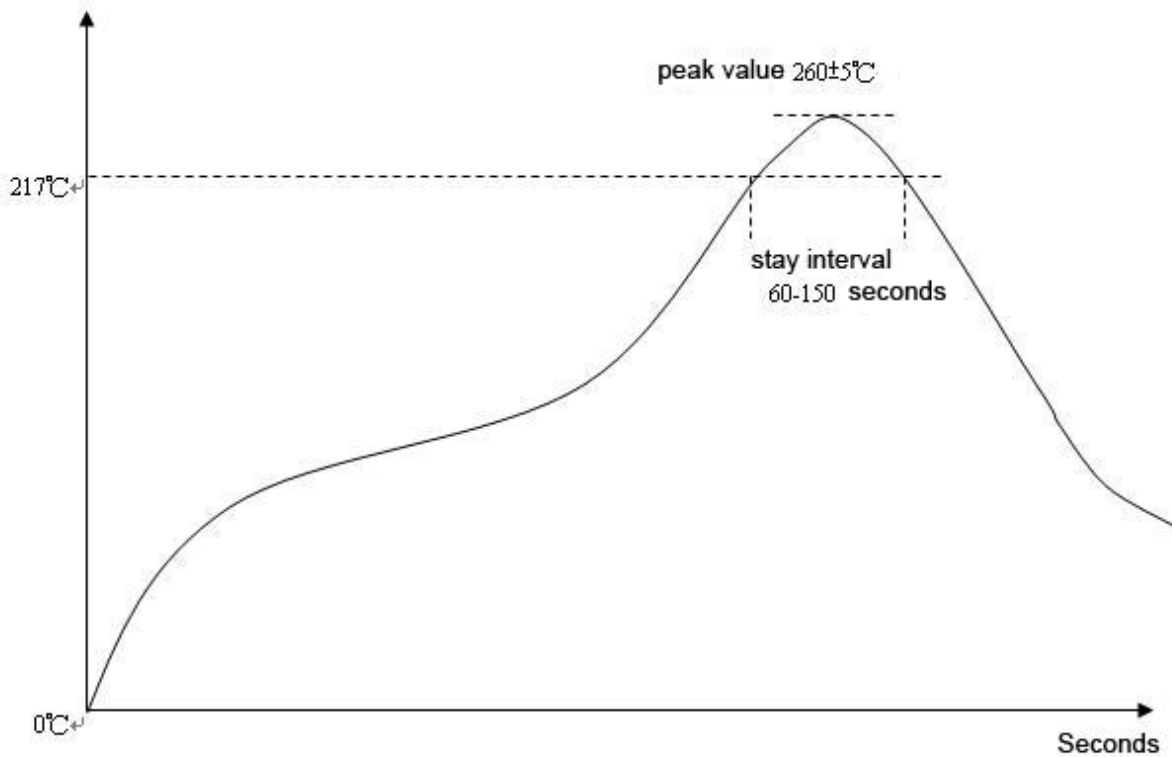
Cover Tape Peel off Strength

Specifications: peel force of top cover tape shall be between 8 to 40g
The peel speed shall be about 300mm/min±5%



Type	Packaging	M	A	B	C	D	W	T
	Embossed	178,0±1,0	2±0,5	13,5±0,7	21±0,5	60,0±1,0	13,5±1,0	15,5±1,0

Lead Free Reflow Soldering Profile



Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity less than 80%RH

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