

# FrelTec

Mathildenstr. 10A  
82319 Starnberg  
Germany

FrelTec

ESD  
SOD882

SOD882

SPECIFICATION

631	ESD8LM5V0C	SD82	E10
Type	Type	Package	Packing
631: ESD	ESD8LM5V0C	SOD882	E10: Embossed tape and reel for 10k pc (7'Reel)

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

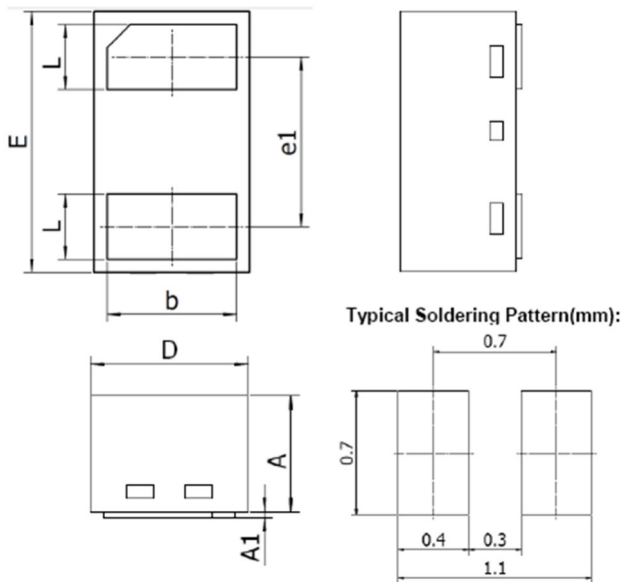
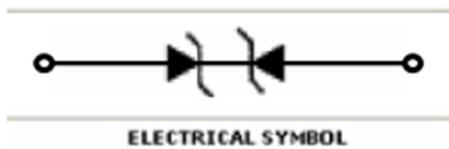


**PACKAGE OUTLINE**

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	$^\circ\text{C}$
$T_J$	Junction Temperature	+125	$^\circ\text{C}$
<b>ESD</b>	IEC61000-4-2 Air discharge Contact discharge	$\pm 15$ $\pm 12$	KV
<b>EFT</b>	IEC61000-4-4	40	A
<b>ESD</b>	Per Human Body Model	16	KV

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

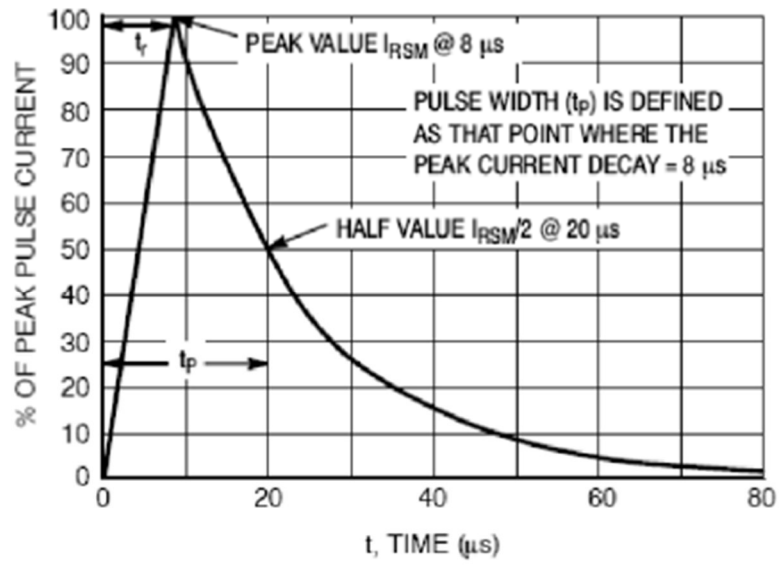
**Electrical Characteristics**  $T_A = 25^\circ\text{C}$  unless otherwise noted

Device Type	$V_{RWM}$ (Volts)	$I_R @$ $V_{RWM}$ ( $\mu\text{A}$ )	$V_{BR} @ I_T$ (Note 1) (Volts)		$I_T$ (mA)	$V_C @$ Max $I_{PP+}$ (Volts)	$I_{PP+}$ (A)	$C @$ $V_R = 0V, f = 1\text{MHz}$ (pF)
	Max	Max	Min	Max		Max		Max
ESD8D5V0C	5,0	1	5,6	11,0	1,0	13	3,5	3,5

+Surge current waveform per Figure1.

Note 1:  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of  $25^\circ\text{C}$

**SURGE CURRENT WAVEFORM:**

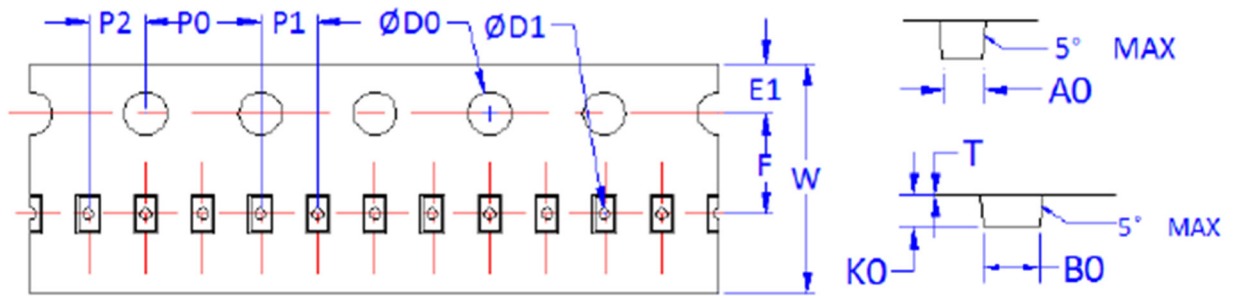


**Figure 1. 8 x 20 µs Pulse Waveform**



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SPECIFICATION

**Tape And Reel Package**



Unit: mm

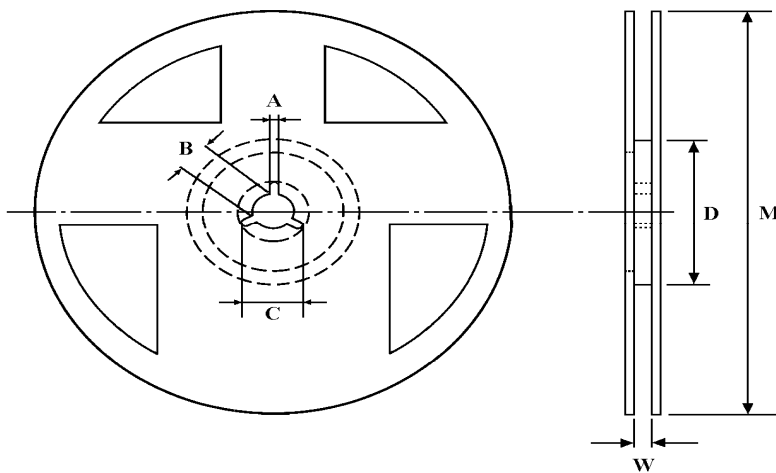
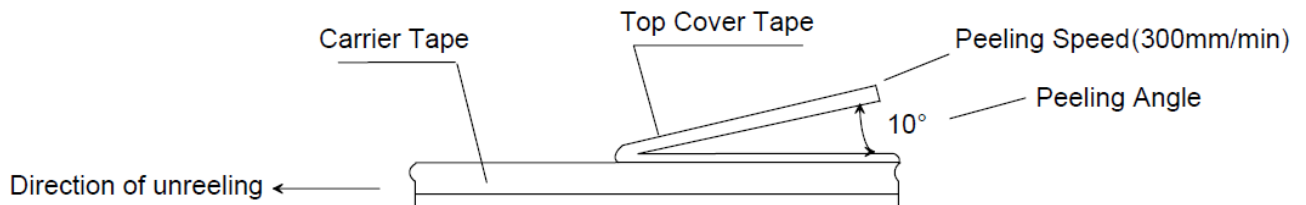
PKG Type	Tape Size	Dim.	W	P1	E1	F	D0	D1	P0	10P0	P2	A0	B0	K0	t
SOD882	8mm	Min.	7.9	1.95	1.65	3.45	1.5	0.35	3.9	39.8	1.95	0.64	1.14	0.61	0.23
		Max.	8.3	2.05	1.85	3.55	1.6	0.45	4.1	40.2	2.05	0.74	1.24	0.71	0.27

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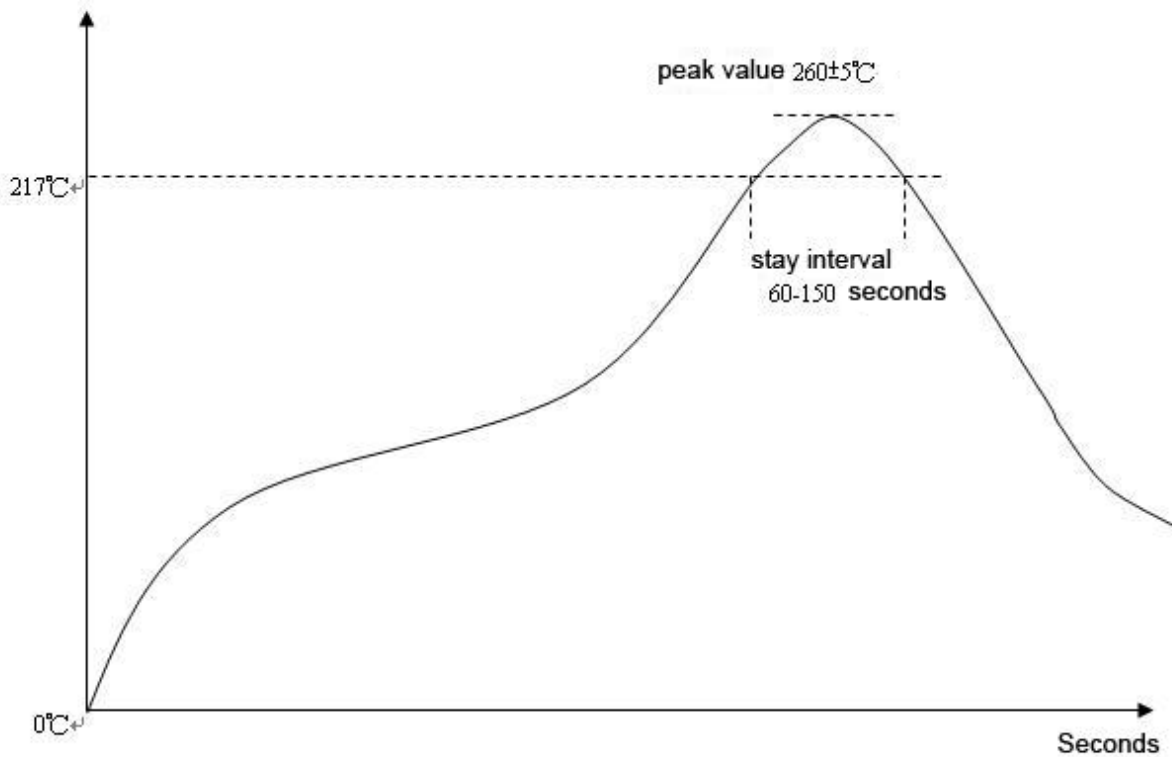
## Cover Tape Peel off Strength

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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