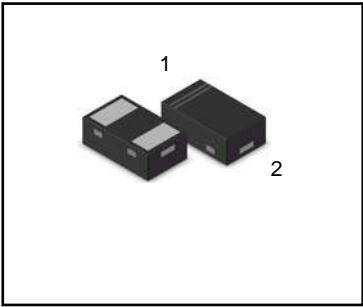



Transistors	Features
<p><u>SOD882</u></p>   <p>Marking :5C</p>	<p>Low Leakage Response Time is Typically < 1 ns ESD Rating of Class 3 per Human Body Model IEC61000-4-2 Level 4 ESD Protection These are Pb-Free Devices We declare that the material of product compliance with RoHS requirements and Halogen Free.</p> <p>Applications</p> <ul style="list-style-type: none"> Cellular phones audio Digital cameras Portable applications Mobile telephone

Discription

The ESD8D5.0C is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, digital cameras and many other portable applications where board space is at a premium.

Ordering information

Device	Marking	Shipping
ESD8D5.0C	5C	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±25 ±20	kV kV
Total Power Dissipation on FR-5 Board (Note 1) @ T _A =25	PD	200	mW
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	

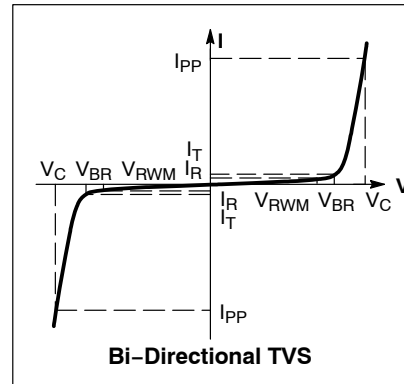
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5 = 1.0*0.75*0.62 in.

ELECTRICAL CHARACTERISTICS

(T_A = 25°C unless otherwise noted)

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}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
P _{pk}	Peak Power Dissipation
C	Capacitance @ V _R = 0 and f = 1.0 MHz



ELECTRICAL CHARACTERISTICS

Device	V _{RWM} (V)	I _{R1} (μ A) @ V _{RWM}	I _{R2} (μ A) @ V _R =3.5V	V _{BR} (V) @ I _T (Note 2)		I _T	V _C (V) @ I _{PP} = 1 A (Note 3)	V _C (V) @ MAX I _{PP} (Note 3)	I _{PP} (A) (Note 3)	P _{PK} (W) (Note 3)	C (pF)
	Max	Max	Max	Min	Max	mA	Max	Max	Max	Max	Max
ESD8D5.0C	5.0	0.5	0.3	5.6	8.0	1.0	9.8	12.5	5.5	69	15

Other voltage available upon request.

- V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25
- Surge current waveform per Figure 3.

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS(CURVES)



Fig1. ESD Clamping Voltage Screenshot Positive 8 kV Contact per IEC61000-4-2

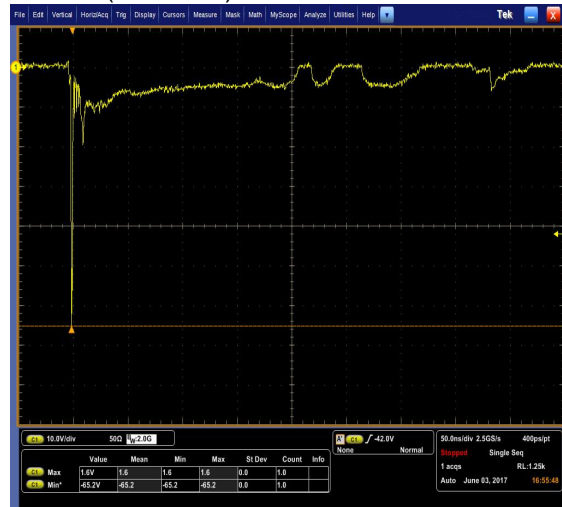


Fig2. ESD Clamping Voltage Screenshot Negative 8 kV Contact per IEC61000-4-2

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS(CURVES)

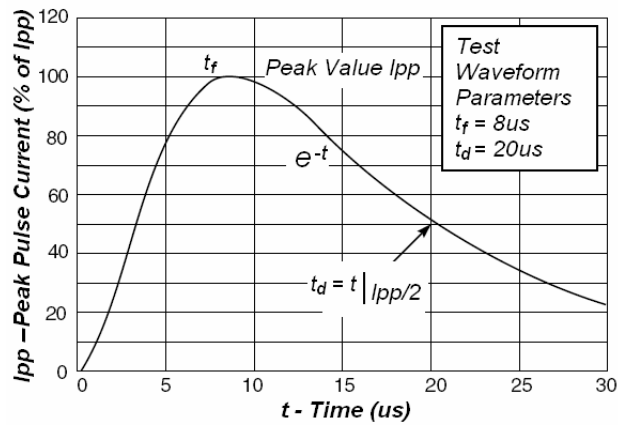


Fig3. Pulse Waveform

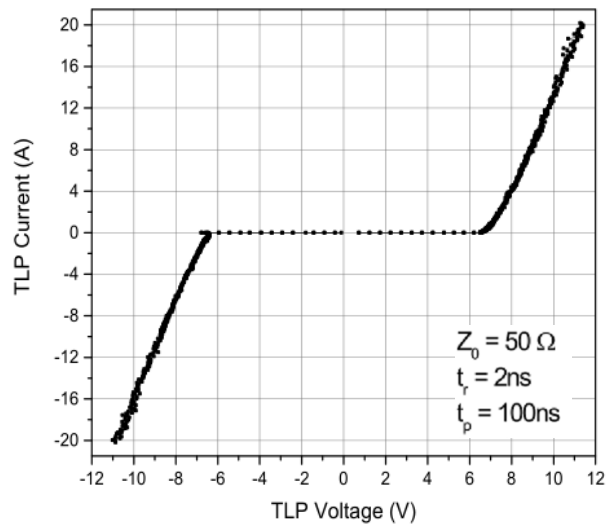
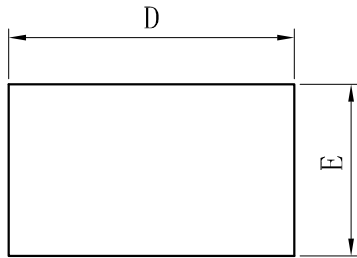
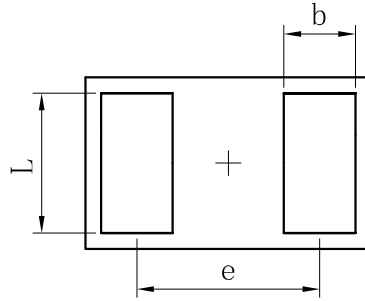


Fig4.TLP Measurement

OUTLINE AND DIMENSIONS

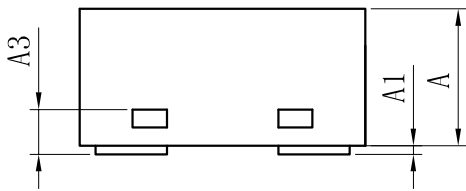


TOP VIEW



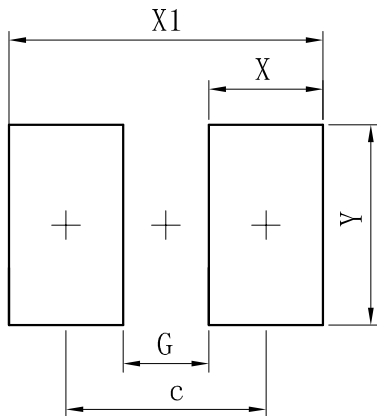
BOTTOM VIEW

SOD882			
Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	-	0.64	-
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	-	0.05
A3	0.127REF.		
All Dimensions in mm			



SIDE VIEW

SOLDERING FOOTPRINT



Dimensions	(mm)
c	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70