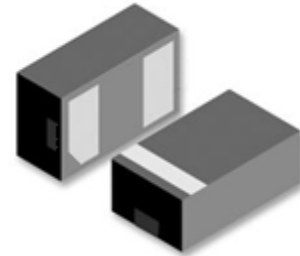


Features

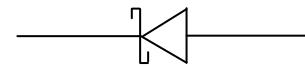
- Low profile
- Low forward voltage
- Forward current: 0.2A
- Reverse Voltage 30V
- MSL: Lever 1



SOD-882

Applications

- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Low voltage rectification
- High efficiency DC-to-DC conversion
- Low power consumption applications



Schematic Diagram

Absolute Maximum Ratings

($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Max	Unit
Continuous Reverse Voltage	V_{RRM}			30	V
Repetitive Peak Forward Current	I_{FRM}	$t_p \leq 1\text{ms}$, $\delta \leq 0.25$		2.5	A
Continuous Forward Current	I_F			0.2	A
Non-repetitive Peak Forward Current	I_{FSM}	$t=8.3\text{ms}$, square wave		3.0	A
Junction Temperature	T_j		-65	+150	$^\circ\text{C}$
Operating Ambient Temperature	$T_{amb}^{(1)}$		-65	+150	$^\circ\text{C}$
Storage Temperature	$T_{stg}^{(1)}$		-65	+150	$^\circ\text{C}$

Notes:

1. For Schottky barrier diodes thermal run-away has to be considered, as in some applications the reverse power losses P_R are a significant part of the total power losses. Nomograms for determining the reverse power losses P_R and $I_{F(AV)}$ rating will be available on request.

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Condition	Typ	Max	Unit
Continuous forward voltage	V_F	$I_F=0.1\text{mA}$	95	190	mV
		$I_F=1\text{mA}$	160	240	mV
		$I_F=10\text{mA}$	240	300	mV
		$I_F=100\text{mA}$	360	420	mV
		$I_F=200\text{mA}$	410	480	mV
Continuous reverse current	I_R	$V_R=10\text{V}$	5	15	μA
		$V_R=30\text{V}$	25	100	μA
Diode capacitance	C_d	$V_R=1\text{V}; f=1\text{MHz}$	30		pF

Pulse test: $t_p \leq 300\mu\text{s}$; $\delta \leq 0.02$

Typical Characteristic Curves

Fig.1 Forward current as a function of forward Voltage; typical values

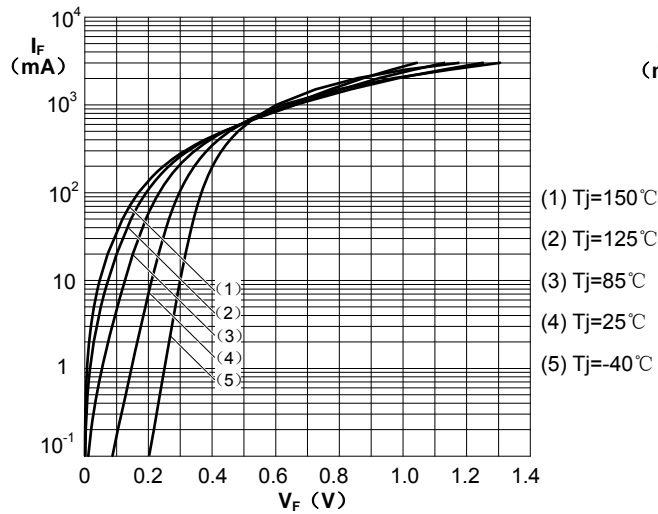


Fig.2 Reverse current as a function of reverse voltage; typical values

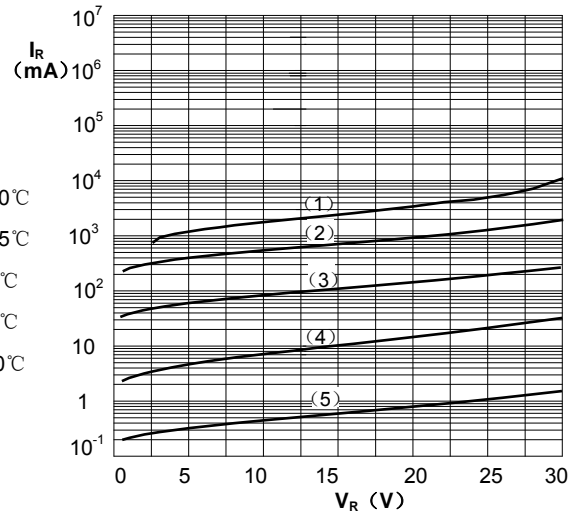
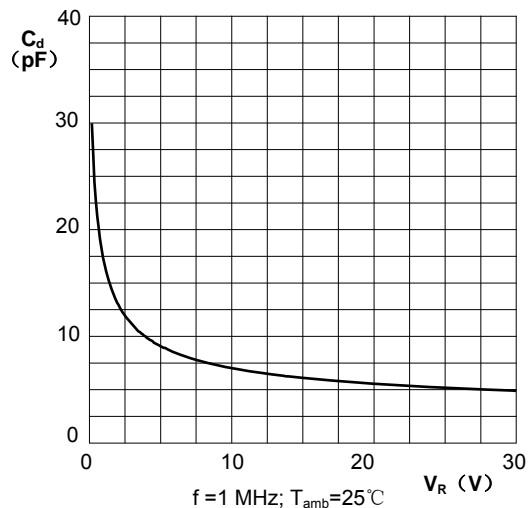
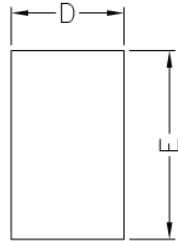
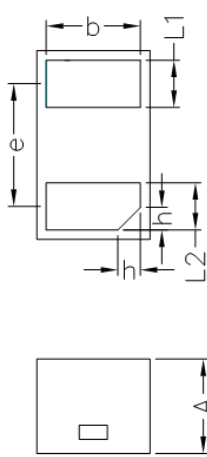


Fig.3 Diode capacitance as a function of reverse Voltage; typical values



Product Dimensions

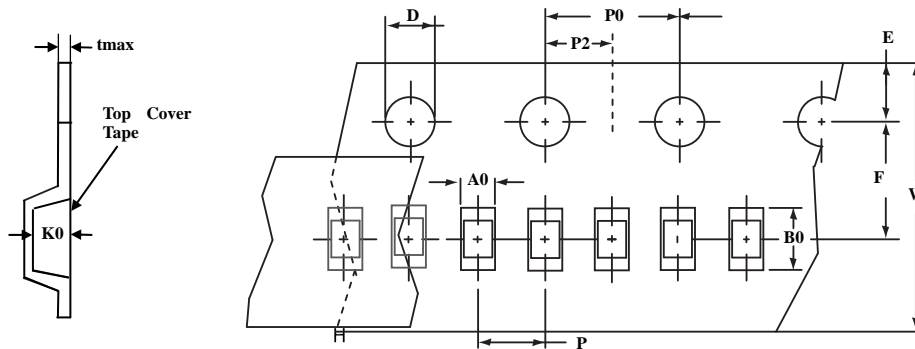
SOD-882



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

Package Informations



A0	B0	K0	D	E	F	W	P0	P2	P	tmax
0.7±0.05	1.1± 0.05	0.42±0.05	1.55±0.05	1.75±0.1	3.5±0.05	8.0± 0.2	4.0± 0.1	2.0± 0.05	2.0±0.05	0.25

Marking



Order Information

Device	Package	Carrier	Quantity	HSF Status
SP3002EL	SOD-882	Tape & Reel	10000pcs/Reel	RoHS compliant