Absolute Maximum Ratings

Symbol	Parameter	Value	Units
I_{PP}	Peak Current (t_p=8/20µs)	2.5	A
T_{OP}	Operating Temperature	-40 to 125	°C
T_{STOR}	Storage Temperature	-55 to 150	°C

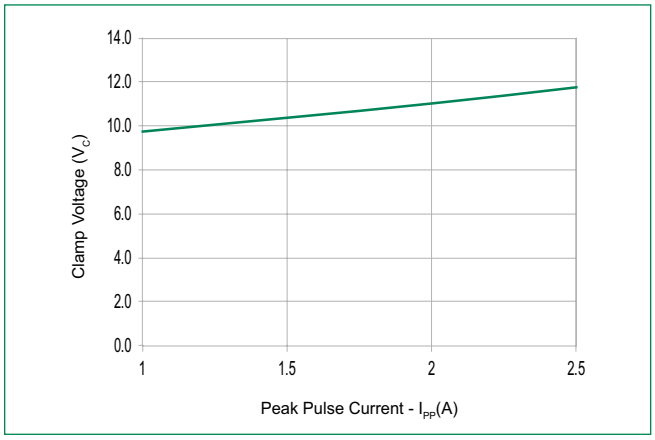
CAUTION: Stresses above those listed in "Absolute Maximum Ratings" may cause permanent damage to the component. This is a stress only rating and operation of the component at these or any other conditions above those indicated in the operational sections of this specification is not implied.

Electrical Characteristics - (T_{OP}=25°C)

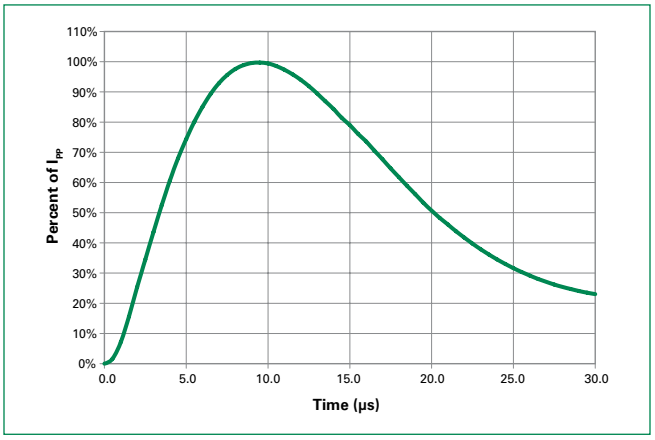
Parameter	Test Conditions	Min	Typ	Max	Units
Input Capacitance	@ V_R = 0V, f = 3GHz		0.30		pF
Breakdown Voltage	V_{BR} @ I_T=1mA		8.2		V
Reverse Working Voltage	I_R≤1µA			7.0	V
Reverse Leakage Current	I_L @ V_{RWM}=5.0V		0.02	1	µA
Dynamic Resistance[2]	TLP, t_P=100ns, I/O to GND		0.58		Ω
Clamping Voltage[1]	V_{CL} @ I_{PP}=2.5A		11.8		V
ESD Withstand Voltage[1]	IEC 61000-4-2 (Contact)	±22			kV
	IEC 61000-4-2 (Air)	±22			

Note:
1. Parameter is guaranteed by design and/or component characterization.
2. Transmission Line Pulse (TLP) with 100ns width, 2ns rise time, and average window t1=70ns to t2= 90ns

Clamping Voltage vs I_{PP}



8/20µs Pulse Waveform



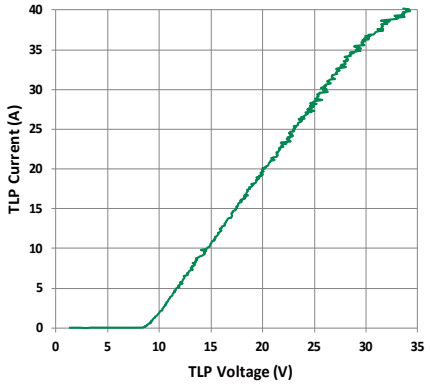
© 2020 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: 07/08/20

Downloaded from Arrow.com.

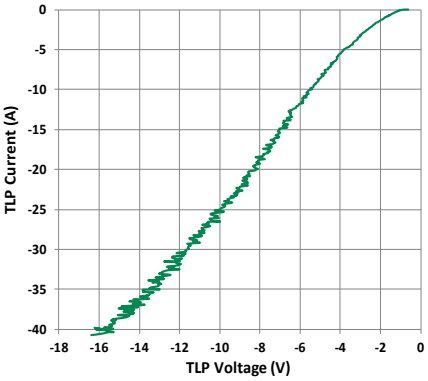
TVS Diode Array (SPA® Diodes)

Enhanced ESD Discrete TVS Series - SP3530

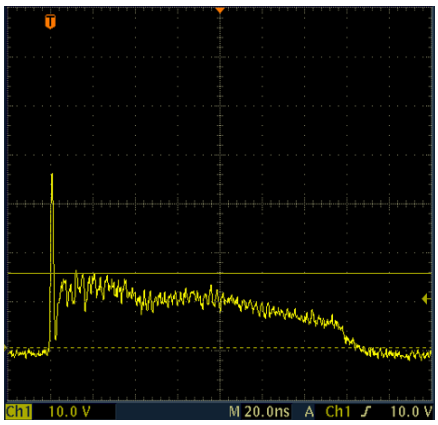
Positive Transmission Line Pulsing (TLP) Plot



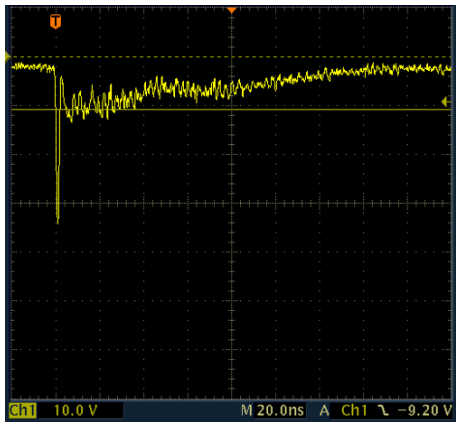
Negative Transmission Line Pulsing (TLP) Plot



IEC 61000–4–2 +8 kV Contact ESD Clamping Voltage

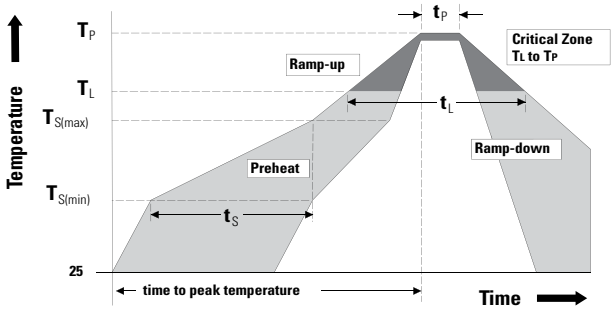


IEC 61000–4–2 -8 kV Contact ESD Clamping Voltage



Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second max
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		$260^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C



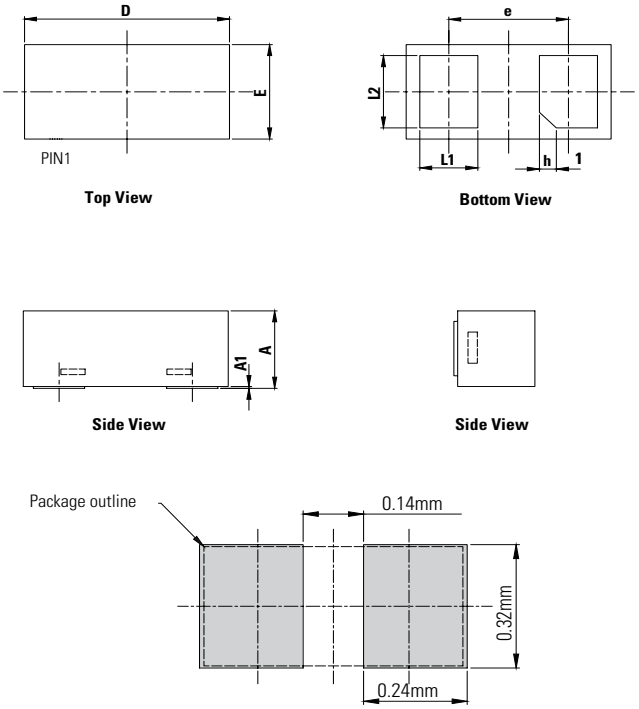
© 2020 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: 07/08/20

Downloaded from Arrow.com.

TVS Diode Array (SPA® Diodes)

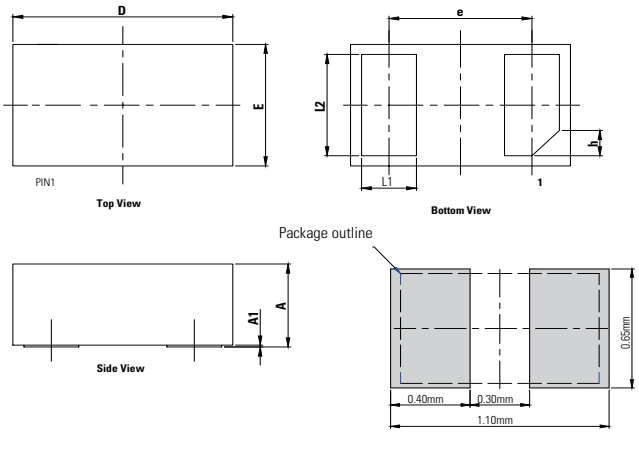
Enhanced ESD Discrete TVS Series - SP3530

Package Dimensions — 0201 DFN



Symbol	Millimeters			Inches		
	Min	Max	Max	Min	Min	Max
A	0.23	0.28	0.33	0.009	0.011	0.013
A1	0.00	0.02	0.05	0.000	0.001	0.002
L1	0.12	0.18	0.24	0.005	0.007	0.009
L2	0.18	0.24	0.30	0.007	0.009	0.012
D	0.55	0.60	0.65	0.022	0.024	0.026
E	0.25	0.30	0.35	0.010	0.012	0.014
e	0.35 (BSC)			0.014 (BSC)		
h	0.05 (x 45°)			0.002 (x 45°)		

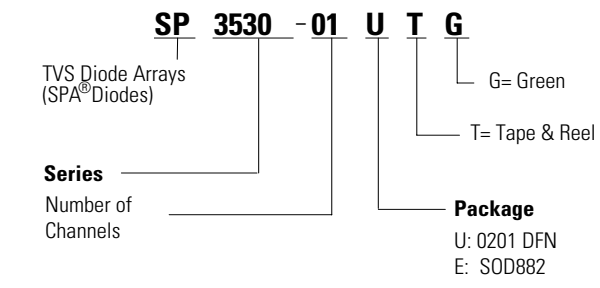
Package Dimensions — SOD882



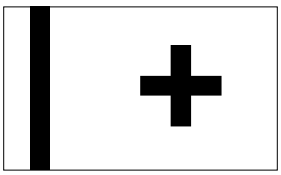
Recommended soldering pad layout

Symbol	Millimeters			Inches		
	Min	Max	Max	Min	Min	Max
A	0.40	0.45	0.50	0.016	0.018	0.020
A1	0.00	0.02	0.05	0.000	0.001	0.002
L1	0.20	0.25	0.30	0.008	0.010	0.012
L2	0.45	0.50	0.55	0.018	0.020	0.022
D	0.90	1.00	1.10	0.035	0.039	0.043
E	0.50	0.60	0.70	0.020	0.024	0.028
e	0.65 (BSC)			0.026 (BSC)		
h	0.125 (x 45°)			0.005 (x 45°)		

Part Numbering System



Part Marking System



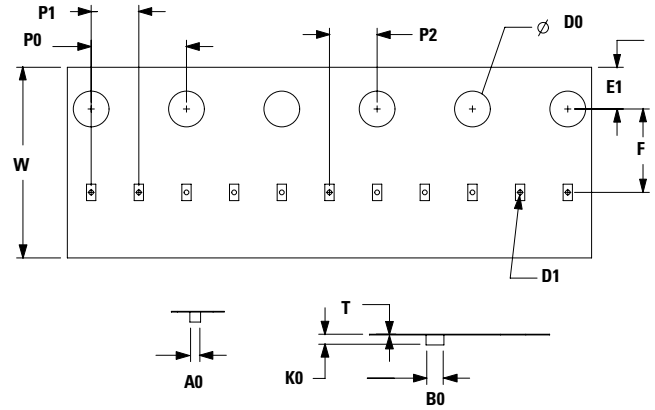
Ordering Information

Part Number	Package	Min. Order Qty.
SP3530-01UTG	0201 DFN	15000
SP3530-01ETG	SOD882	10000

© 2020 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: 07/08/20

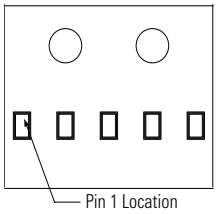
Downloaded from Arrow.com.

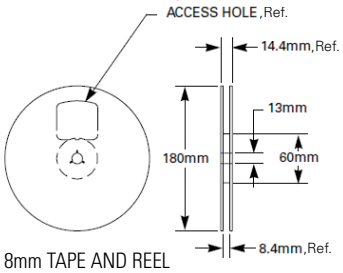
Embossed Carrier Tape & Reel Specification — 0201 DFN



Symbol	Millimeters
A0	0.33 min/0.41 max
B0	0.63 min/0.71 max
D0	ø 1.50 +0.10/ -0
D1	ø 0.20 +/- 0.05
E1	1.75+/-0.10
F	3.50+/-0.05
K0	0.30 min/0.39 max
P0	4.00+/-0.10
P1	2.00+/-0.10
P2	2.00+/-0.05
W	8.00+0.30/-0.10
T	0.13 min/0.25 max

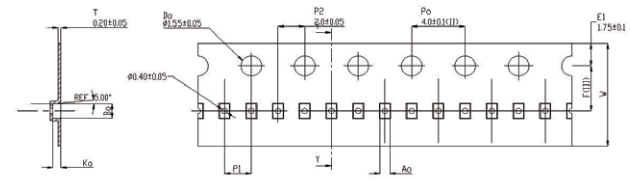
Device Orientation in Tape





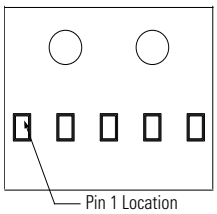
8mm TAPE AND REEL

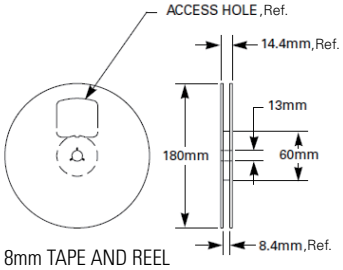
Embossed Carrier Tape & Reel Specification — SOD882



Symbol	Millimeters
A0	0.70+/-0.045
B0	1.10+/-0.045
K0	0.65+/-0.045
F	3.50+/-0.05
P1	2.00+/-0.10
W	8.00 + 0.30 -0.10

Device Orientation in Tape





8mm TAPE AND REEL

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at http://www.littelfuse.com/disclaimer-electronics.

© 2020 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: 07/08/20

Downloaded from Arrow.com.