

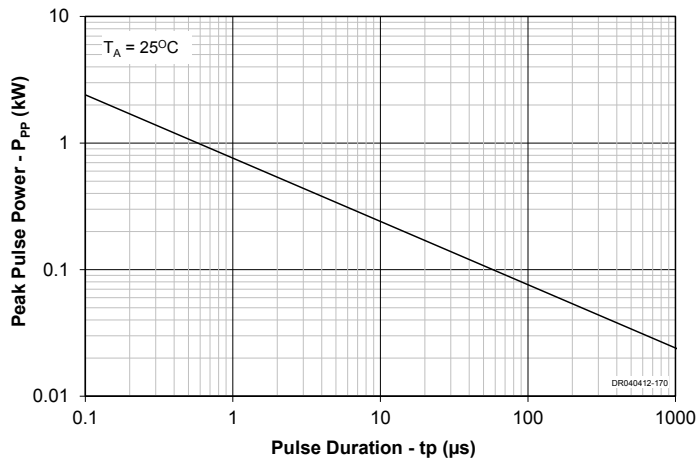
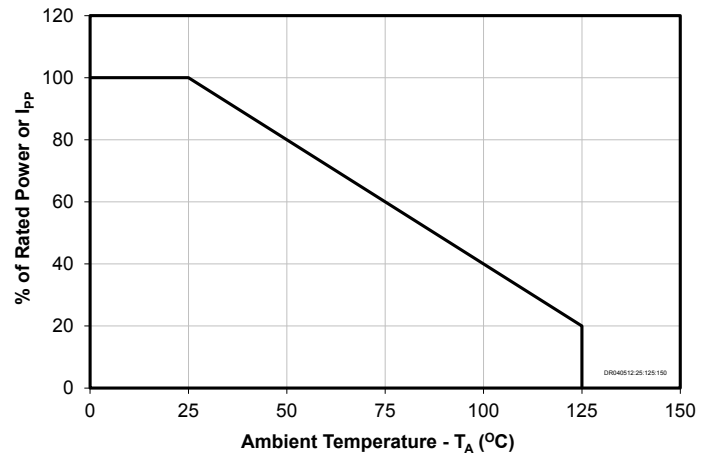
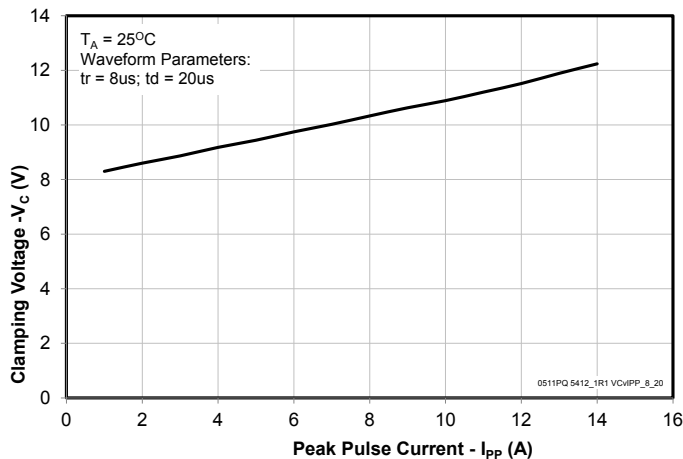
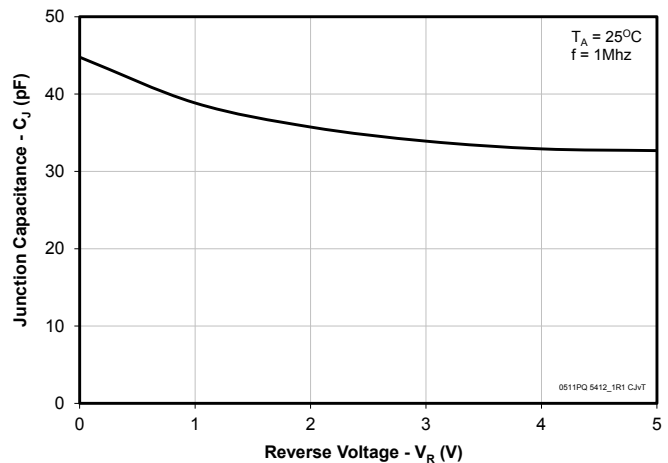
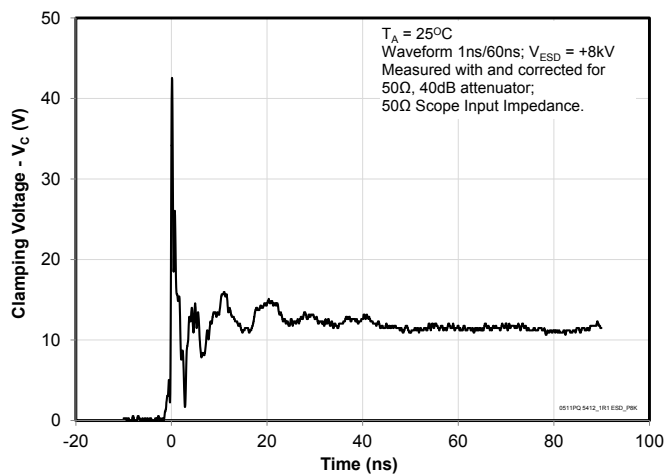
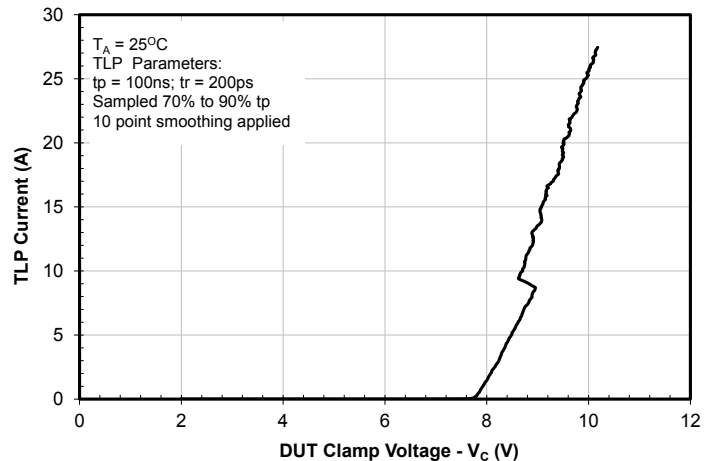
PROTECTION PRODUCTS

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{pk}	170	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{pp}	12	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/- 30 +/- 30	kV
Operating Temperature	T_j	-40 to +125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typi- cal	Maxi- mum	Units
Reverse Stand-Off Voltage	V_{RWM}	Pin 1 to 2 or 2 to 1			5	V
Reverse Breakdown Voltage	V_{BR}	$I_L = 1mA$ Pin 1 to 2 or 2 to 1 $T = -40^\circ C$ to $+125^\circ C$	6	8	10	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$, Pin 1 to 2 or 2 to 1		0.025	1	μA
Clamping Voltage	V_C	$I_{pp} = 1A$, $t_p = 8/20\mu s$ Pin 1 to 2 or 2 to 1			11	V
Clamping Voltage	V_C	$I_{pp} = 12A$, $t_p = 8/20\mu s$ Pin 1 to 2 or 2 to 1			14	V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$ Pin 1 to 2 or 2 to 1			75	pF

PROTECTION PRODUCTS
Typical Characteristics
Non-Repetitive Peak Pulse Power vs. Pulse Time

Power Derating Curve

Clamping Voltage vs. Peak Pulse Current

Capacitance vs. Reverse Voltage

ESD Clamping (8kV Contact per IEC 61000-4-2)

TLP Clamping Voltage vs. Current


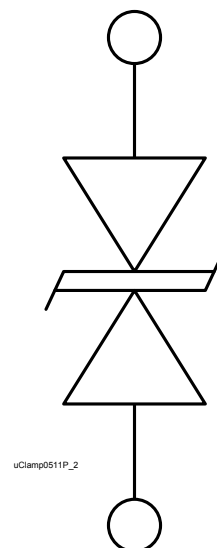
PROTECTION PRODUCTS**Applications Information****Device Connection Options**

These TVS diodes are designed to protect one data, I/O, or power supply line. The device is bidirectional and may be used on lines where the signal polarity can go above and below ground.

Circuit Board Layout Recommendations for Suppression of ESD.

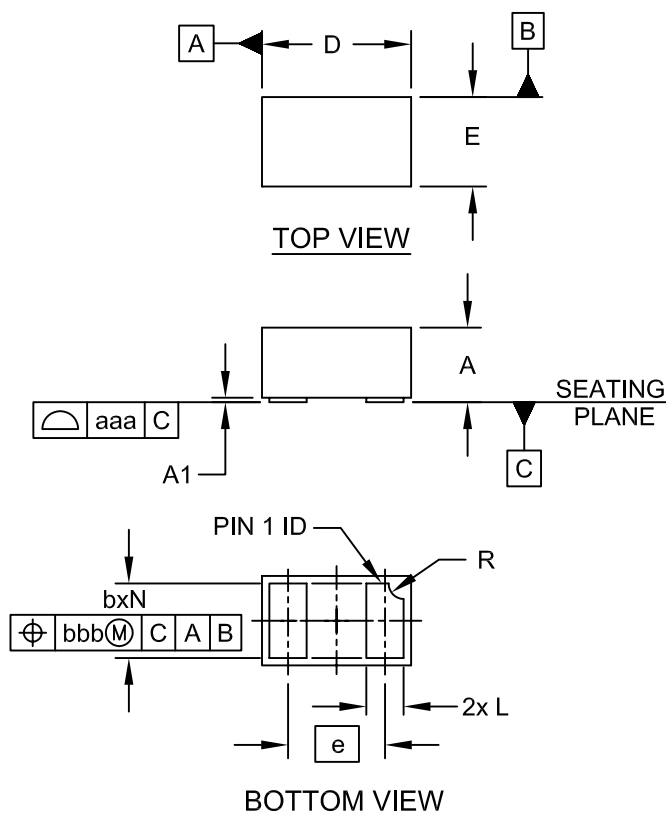
Good circuit board layout is critical for the suppression of ESD induced transients. The following guidelines are recommended:

- Place the TVS near the input terminals or connectors to restrict transient coupling.
- Minimize the path length between the TVS and the protected line.
- Minimize all conductive loops including power and ground loops.
- The ESD transient return path to ground should be kept as short as possible.
- Never run critical signals near board edges.
- Use ground planes whenever possible.

Equivalent Circuit Diagram

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Outline Drawing - SLP1006P2



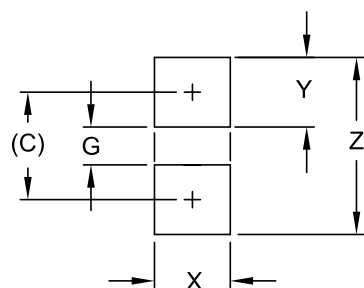
DIM	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.016	.020	.022	0.40	0.50	0.55
A1	.000	.001	.002	0.00	0.03	0.05
b	.018	.020	.022	0.45	0.50	0.55
D	.035	.039	.043	0.90	1.00	1.10
E	.020	.024	.028	0.50	0.60	0.70
e	.026 BSC			0.65 BSC		
L	.008	.010	.012	0.20	0.25	0.30
R	.002	.004	.006	0.05	0.10	0.15
N	2			2		
aaa	.003			0.08		
bbb	.004			0.10		

LNIS-66YP35 R3

NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).

Land Pattern - SLP1006P2



DIM	DIMENSIONS	
	INCHES	MILLIMETERS
C	(.033)	(0.85)
G	.012	0.30
X	.024	0.60
Y	.022	0.55
Z	.055	1.40

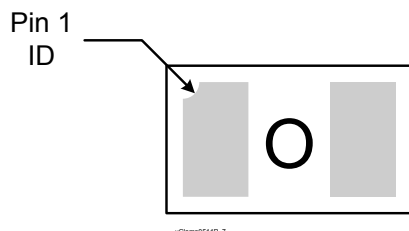
LNIS-66YP35 R3

NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY.
CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR
COMPANY'S MANUFACTURING GUIDELINES ARE MET.

PROTECTION PRODUCTS

Marking



Notes:

- 1) Device is electrically symmetrical

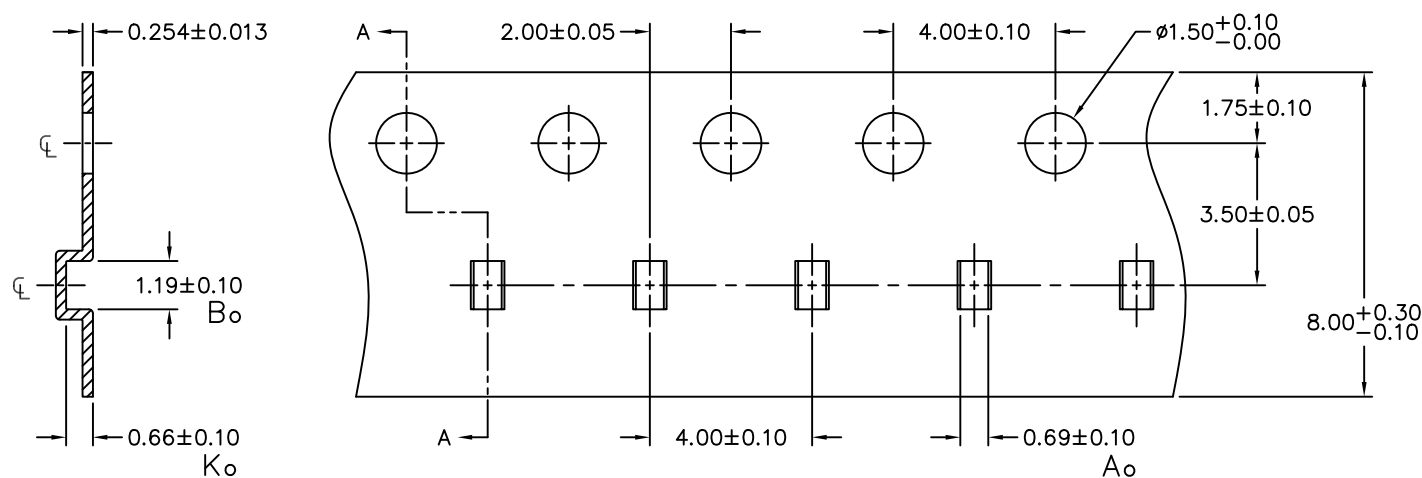
Ordering Information

Part Number	Qty per Reel	Reel Size
uClamp0511P.TCT	3,000	7 Inch
uClamp0511P.TNT	10,000	7 Inch

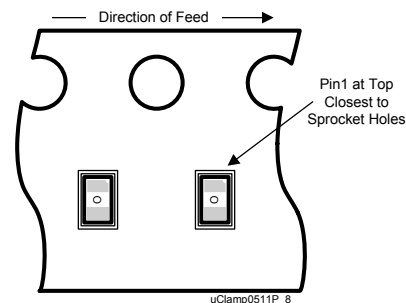
Note: Lead finish is lead-free NiPdAu.

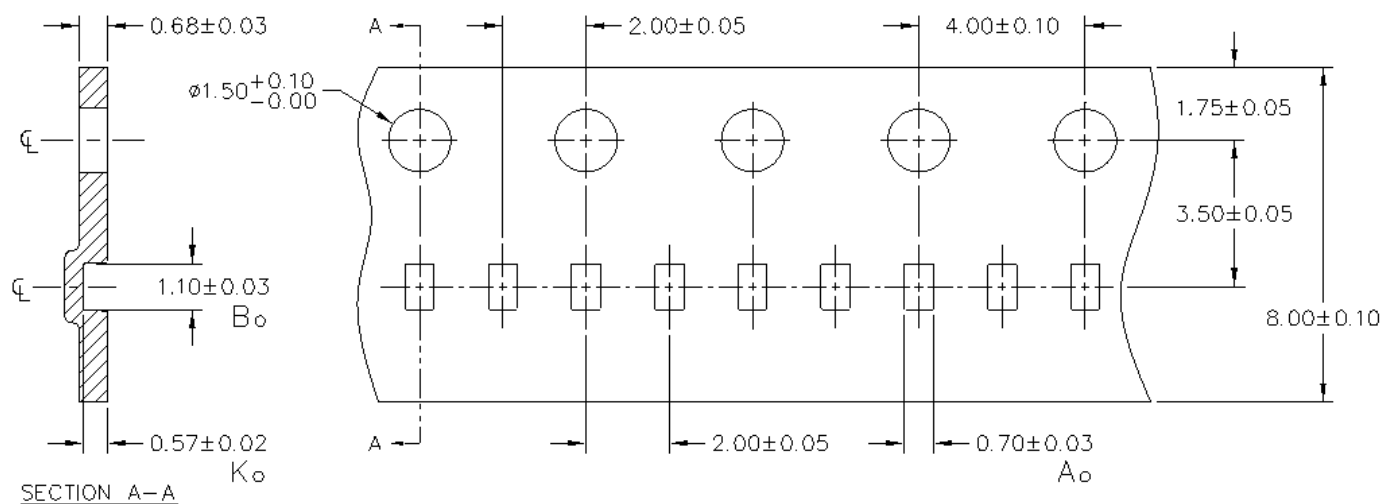
MicroClamp, uClamp and μ Clamp are marks of Semtech Corporation.

Tape and Reel Specification (4mm Pitch, 3,000 Piece Reel)



NOTES: 1.) ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



PROTECTION PRODUCTS
Tape and Reel Specification (2mm Pitch, 10,000 Piece Reel)


NOTES: ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

Contact Information

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