Absolute Maximum Ratings

Rating	Symbol	Value	Units
Peak Pulse Power (t_p = 8/20µs)	P_{PK}	275	W
Peak Pulse Current (t_p = 8/20µs)	I_{PP}	25	A
ESD per IEC 61000-4-2 (Air)(1) ESD per IEC 61000-4-2 (Contact)(1)	V_{ESD}	±30 ±30	kV
Operating Temperature	T_J	-40 to +125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

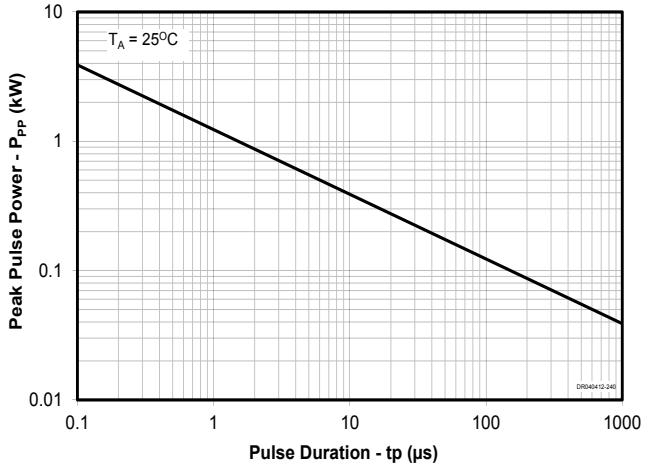
Electrical Characteristics (T=25°C unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	Pin 1 to 2 or Pin 2 to 1				3.3	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA, Pin 1 to 2 or Pin2 to 1		4.5	8.5	10	V
Reverse Leakage Current	I_R	V_{RWM} = 3.3V			1	100	nA
Clamping Voltage	V_C	I_{PP} = 25A, t_p = 8/20µs,				11.5	V
ESD Clamping Voltage[2]	V_C	I_{PP} = 4A, t_p = 0.2/100ns (TLP)			8.3		V
ESD Clamping Voltage[2]	V_C	I_{PP} = 16A, t_p = 0.2/100ns (TLP)			8		V
Dynamic Resistance[2, 3]	R_{DYN}	t_p = 0.2/100ns (TLP)			0.025		Ohms
Junction Capacitance	C_J	V_R = 0V, f = 1MHz	T = 25°C		30	35	pF

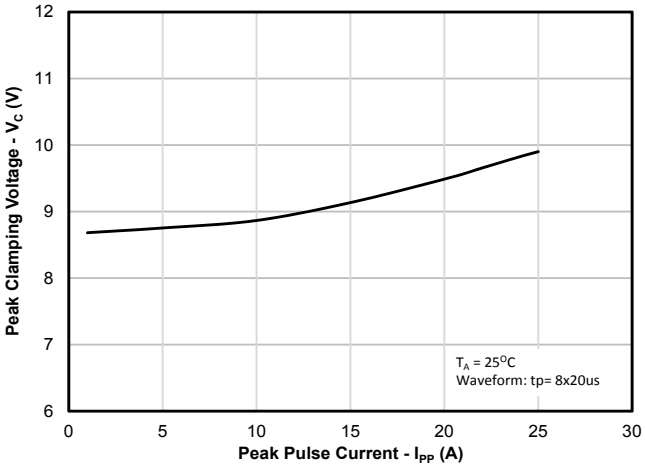
Notes:
(1): Measured with a 20dB attenuator, 50 Ohm scope input impedance, 2GHz bandwidth. ESD gun return path connected to Ground Reference Plane (GRP)
(2): Transmission Line Pulse Test (TLP) Settings: tp = 100ns, tr = 0.2ns, I_{TLP} and V_{TLP} averaging window: t_1 = 70ns to t_2 = 90ns.
(3): Dynamic resistance calculated from I_{TLP} = 4A to I_{TLP} = 16A

Typical Characteristics

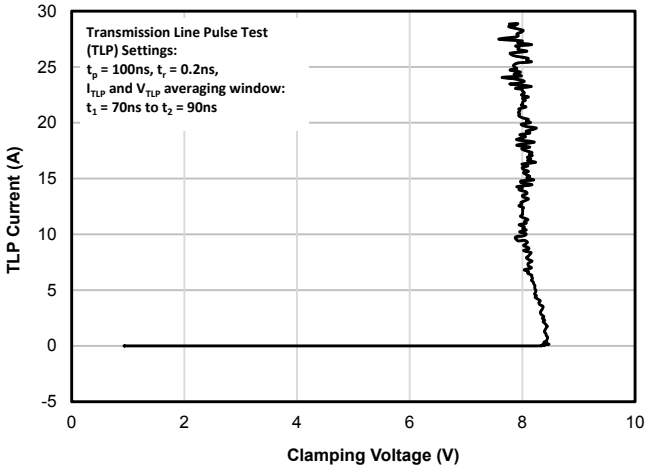
Non-Repetitive Peak Pulse Power vs. Pulse Time



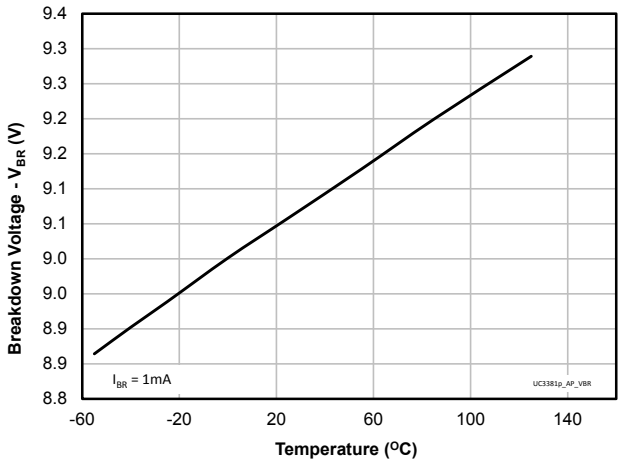
Clamping Voltage vs. Peak Pulse Current (tp=8/20µs)



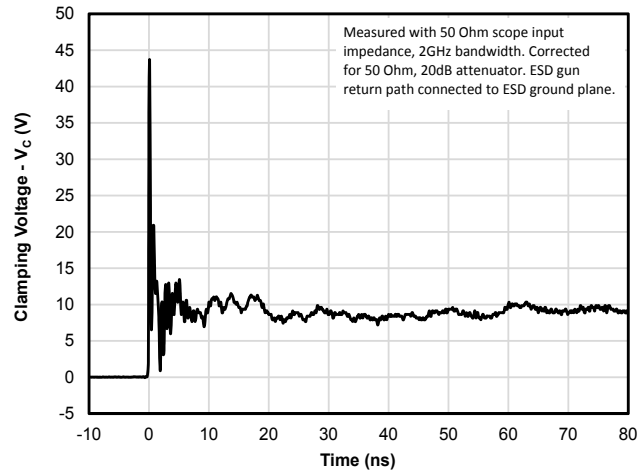
TLP Charateristic



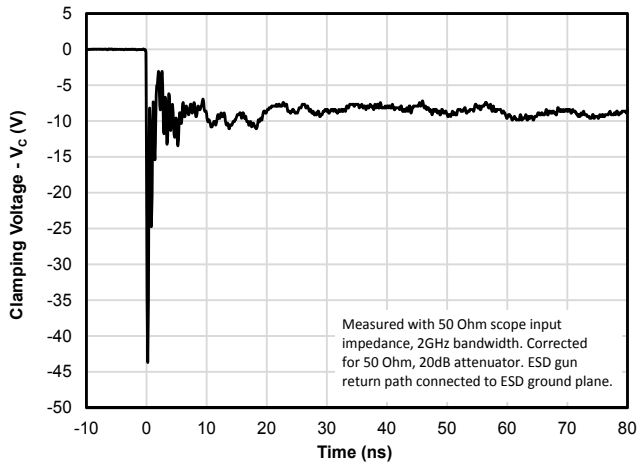
Typical Breakdown Voltage vs. Temperature



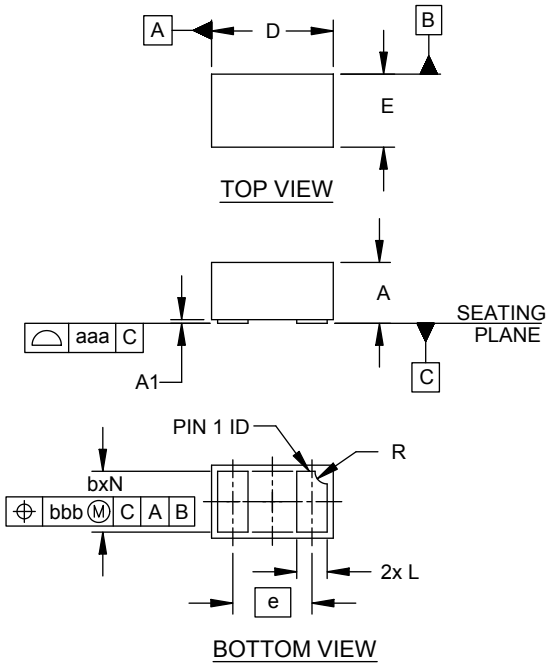
ESD Clamping (8kV Contact per IEC 61000-4-2)



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



Outline Drawing - SGP1006N2



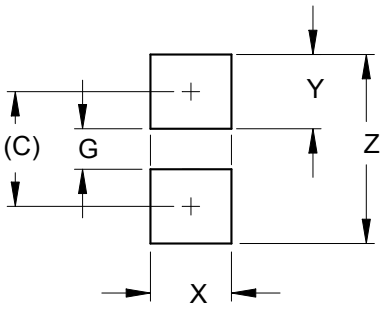
DIMENSIONS						
DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.016	.020	.022	0.40	0.50	0.55
A1	.000	.001	.002	0.00	0.03	0.05
b	.018	.020	.022	0.45	0.50	0.55
D	.035	.039	.043	0.90	1.00	1.10
E	.020	.024	.028	0.50	0.60	0.70
e	.026 BSC			0.65 BSC		
L	.008	.010	.012	0.20	0.25	0.30
R	.002	.004	.006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

SLP1006P2-1-R0

NOTES:

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

Land Pattern - SGP1006N2



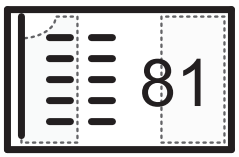
DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.033)	(0.85)
G	.012	0.30
X	.024	0.60
Y	.022	0.55
Z	.055	1.40

SLP1006P2-2-R0

NOTES:

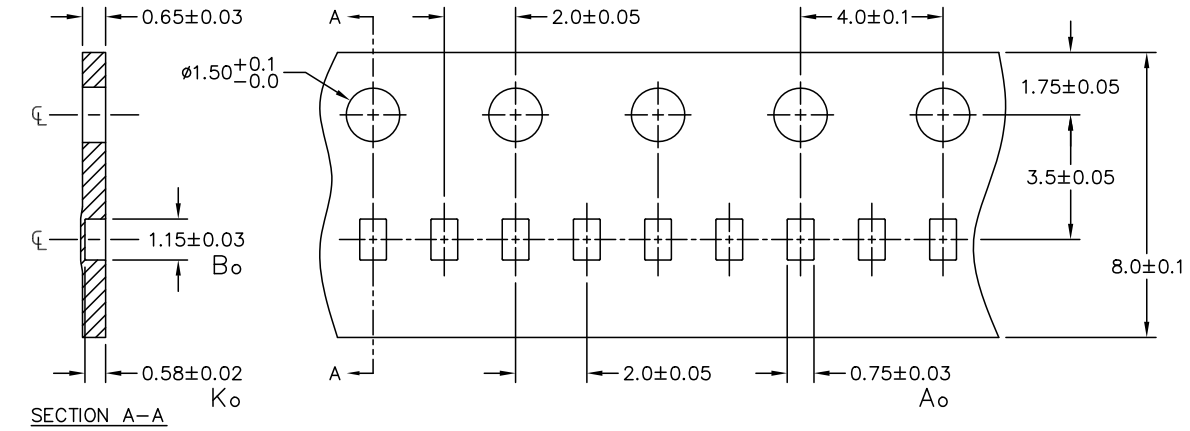
1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY.CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

Marking Code

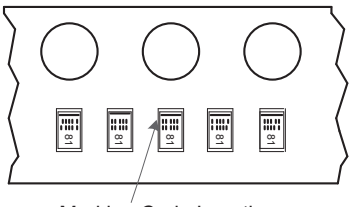


Notes:
1. Device is electrically symmetrical.
2. Marking will also include line matrix date code.
3. Bar indicates Pin 1 location.

Tape and Reel Specification



NOTES: ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



Ordering Information

Part Number	Qty per Reel	Reel Size
µClamp3381P.TFT	15,000	7 Inch

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