

### Features

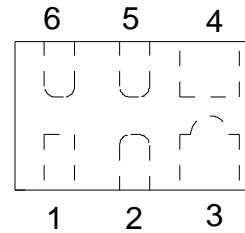
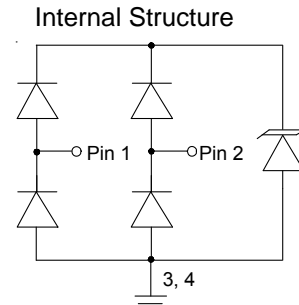
- Ultra Low Capacitance 0.5pF typical
- Low operating Voltage: 5.0 V
- Low clamping voltage
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5(Lightning)5A(5/50ns)

### Applications

- USB 2.0
- HDMI 1.3
- SATA and eSATA
- DVI
- IEEE 1394
- PCI Express
- Portable Electronics
- Notebooks

### Mechanical Characteristics

- JEDEC SLP1610P4 package
- Molding compound flammability rating: UL 94V-0



Pin	Identification
1 - 2	Input Lines
5 - 6	Output Lines (No Internal Connection)
3 - 4	Ground

### Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

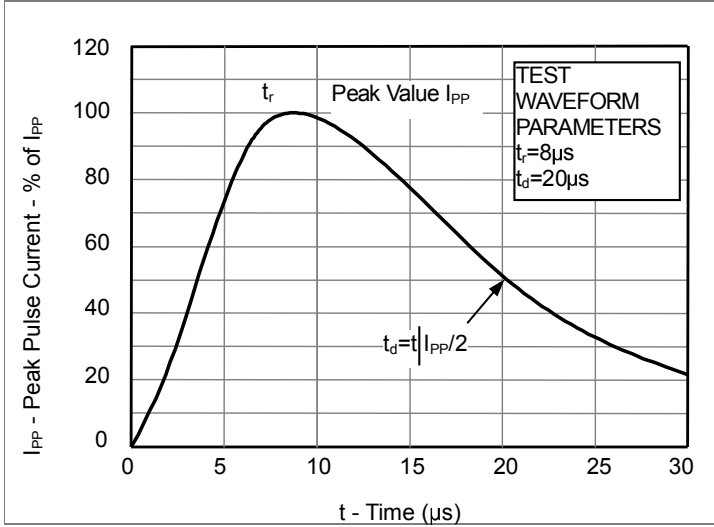
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P <sub>pk</sub>	150	W
Peak Pulse Current (8/20μs)	I <sub>PP</sub>	5	A
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	±25	kV
ESD per IEC 61000-4-2 (Contact)		±20	
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C

**Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)**

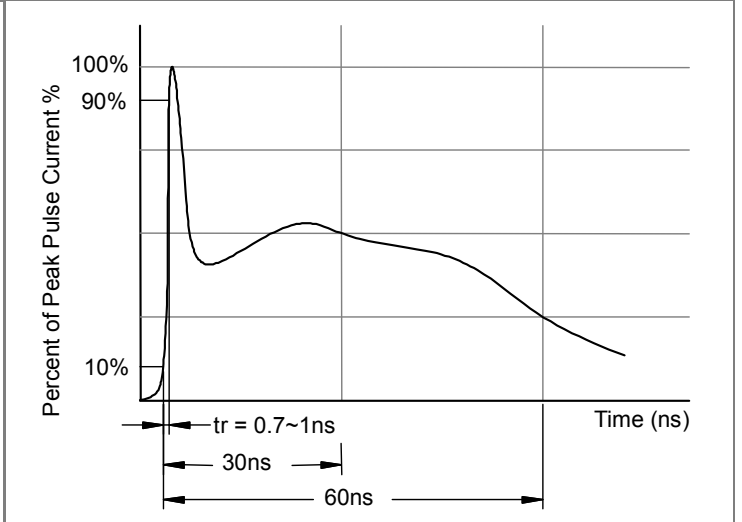
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
<b>DP, DM, USB ID TVS</b>						
Reverse Working Voltage	V <sub>RWM</sub>			5.0	V	
Breakdown Voltage	V <sub>BR</sub>	6.0			V	I <sub>T</sub> = 1mA
Reverse Leakage Current	I <sub>R</sub>			0.5	μA	V <sub>RWM</sub> = 5.0V
Clamping Voltage	V <sub>C</sub>			15	V	I <sub>PP</sub> = 1A (8 x 20μs pulse), any I/O pin to ground
Clamping Voltage	V <sub>C</sub>			25	V	I <sub>PP</sub> = 5A (8 x 20μs pulse), any I/O pin to ground
Junction Capacitance	C <sub>J</sub>		0.5	1.0	pF	V <sub>R</sub> = 0V, f = 1MHz, any I/O pin to ground

**Typical Characteristics**

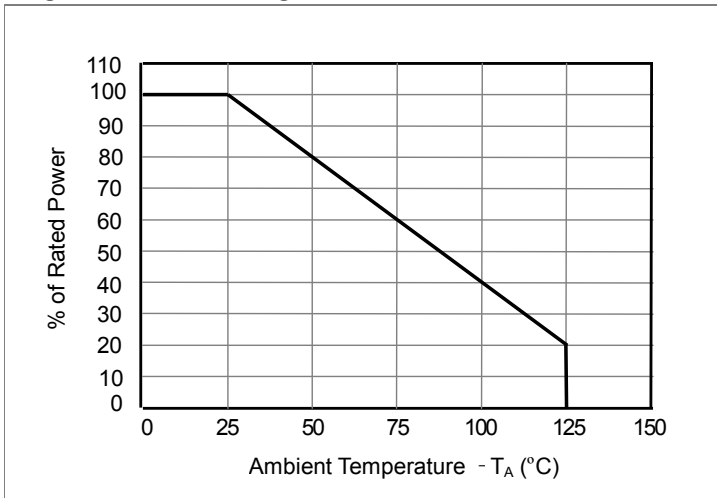
**Fig1. 8/20μs Pulse Waveform**



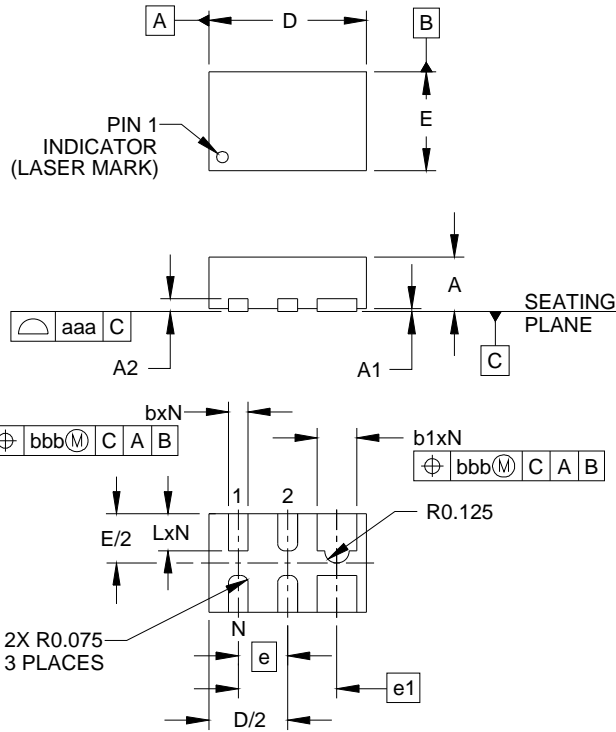
**Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)**



**Fig3. Power Derating Curve**



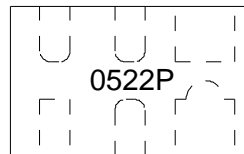
**Outline Drawing - SLP1610P4**



DIM	INCHES		MILLIMETERS			
	MIN	NOM	MAX	MIN	NOM	MAX
A	.020	.023	.026	0.50	0.58	0.65
A1	0.00	.001	.002	0.00	0.03	0.05
A2		(.005)			(0.13)	
b	.006	.008	.010	0.15	0.20	0.25
b1	.014	.016	.018	0.35	0.40	0.45
D	.059	.063	.067	1.50	1.60	1.70
E	.035	.039	.043	0.90	1.00	1.10
e	.020 BSC		0.50 BSC			
e1	.039 BSC		1.00 BSC			
L	.012	.015	.017	0.30	0.38	0.43
N	4		4			
aaa	.003		0.08			
bbb	.004		0.10			

NOTES:

**Marking**



**Ordering information**

Order code	Package	Base qty	Delivery mode
RCLAMP0522P	SLP1610P4	3000	Tape and reel