



**PRODUCT DISCONTINUANCE NOTIFICATION**  
**EOL-000342.r1**  
**Date: 15MAR2022**

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Semtech Corporation, 200 Flynn Road, Camarillo CA 93012

**Product Discontinuance Details**

**Purpose, Description and Effect of Change:**

This notification is to inform your company that Semtech is discontinuing the manufacture of the RClamp0524P.TCT product listed below. In accordance with Semtech's product discontinuation policy, we are hereby giving notice of these product changes in order for your company to make any final lifetime purchases of the discontinued products that are still in supply.

RClamp0594P.TCT will be available as an equivalent replacement for this part.

**Part Number(s) Affected:**  
RClamp0524P.TCT

**Customer Part Number(s) Affected:**  N/A

**Replacement or Alternate Part Number(s)**  
RClamp0594P.TAT

<b>Last Time Buy (LTB) Date</b>	15SEP2022	<b>Must Accept Final Delivery by</b>	15MAR2023
<b>Sample Availability of Alt. Part</b>	Immediate	<b>Qualification Report Availability of Alt. Part</b>	Attached

**Supporting Documents for Alternate or Replacement parts/Attachments:**

- RJ #7078 Final Reliability Report.
- RClamp0594P Data Sheet.

**Last Time Buy Conditions**

We request you carefully review this information and notify your purchasing offices and buyers to place your company's final purchases for available discontinued products as soon as possible according to the following last time buy terms and conditions.

1. **Availability:** The *Last Time Buy Date* and *Date to Accept Final Delivery* are noted above. All orders must have a **requested ship date before the Date to Accept Final Delivery** or the order will be rejected. **The Last Time Buy Date automatically expires when the final available inventory quantity has been scheduled and sold.**
2. **Pricing:** The product unit price will be subject to Semtech's individual price quotation of your company's last time buy requirements.
3. **Order Acceptance/Change Conditions:**
  - A. Semtech will accept last time orders from your company for the discontinued products as "Firm and Final". As such, these orders will not be subject to any reschedule, cancellation, or termination by your company without Semtech's prior written authorization and payment of full termination charges.
  - B. Semtech reserves its right to make changes in the scheduled delivery dates, or to terminate remaining undelivered quantities of your company's last time buy order, due to changes in



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Semtech's last time manufacturing capabilities, or for commercially impracticable circumstances, which makes delivery not feasible.

4. **Quantities:** The following applies to final buy quantities for the available discontinued product:
- A. **First:** The quantities in any existing unfilled orders and contracts acknowledged by Semtech will be honored, then
  - B. **Next:** The unfilled quantities in any volume agreement(s) or quantities in unexpired standalone quote(s) will be accepted, and
  - C. **Finally:** Any additional reasonable quantity of product that Semtech quotes based upon your company's identified requirements will be taken.

IN THE EVENT OF CONFLICT FOR THE LIMITED AVAILABILITY PRODUCT, QUANTITIES FOR CUSTOMER'S OR DISTRIBUTOR'S ORDERS WILL BE DETERMINED ON A FIRST-COME FIRST-SERVE BASIS; AND WILL BE SUBJECT TO SEMTECH'S AVAILABLE INVENTORY AND REMAINING MANUFACTURING CAPACITY FOR THE PRODUCT.

## Limited Warranty

All discontinued product orders subject to this notice shall carry Semtech's standard limited warranty; or, if applicable, the warranty set forth in a duly executed formal contract between Semtech and your company will apply; except that:

- 1. Semtech will accept all valid warranty claims for credit only, unless a replacement order is otherwise agreed upon by Semtech and the replacement parts can be manufactured or delivered from remaining inventory.
- 2. The applicable warranty period for making any return claims for discontinued products will be no later than ninety (90) days following delivery of the discontinued products.
- 3. Any return claims must be made under Semtech's current Return Material Authorization "RMA" procedures.

## Additional Provisions

SEMTECH ACCEPTS NO LIABILITY FOR EXCESS REPROCUREMENT COSTS OR FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHATSOEVER ASSOCIATED WITH THIS NOTICE, WITH ITS PRODUCTS, OR WITH THE FINAL MANUFACTURE AND PERFORMANCE AGAINST ANY LAST TIME BUY ORDERS RELATED TO THE DISCONTINUED PRODUCTS COVERED BY THIS NOTICE.




We regret the inconvenience and impact this notice may cause your company. Semtech's sales, marketing, and distribution personnel stand ready to assist you in placing your company's final orders, or in providing the product information you require.

For product inquiries or purchase order information, please contact your local Semtech sales representative.



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Issuing Authority			
<b>Semtech Business Unit:</b>	PROTECTION		
<b>Semtech Contact Info:</b>	<table border="1"><tr><td>Les Fang Yuen  Semtech Corporation Qualit Assurance 200 Flynn Road Camarillo, CA 93012 lfangyuen@semtech.com Office: (949) 269-4443 Fax: (805) 498-3804</td><td></td></tr></table>	Les Fang Yuen  Semtech Corporation Qualit Assurance 200 Flynn Road Camarillo, CA 93012 lfangyuen@semtech.com Office: (949) 269-4443 Fax: (805) 498-3804	
Les Fang Yuen  Semtech Corporation Qualit Assurance 200 Flynn Road Camarillo, CA 93012 lfangyuen@semtech.com Office: (949) 269-4443 Fax: (805) 498-3804			
FOR FURTHER INFORMATION & WORLDWIDE SALES COVERAGE: <a href="http://www.semtech.com/contact/index.html#support">http://www.semtech.com/contact/index.html#support</a>			

**RCLAMP0594P**

<b>Semtech Job#</b>	7078
<b>Accepted Date</b>	12-12-2019
<b>Job Type</b>	New Product on qualified process with un-qualified package
<b>Business Unit</b>	Protection
<b>Package Type</b>	SMF2510P8
<b>Package Lead</b>	8
<b>Assembly Designator</b>	SCI
<b>Master Process</b>	PALM E
<b>Fab Designator</b>	Tower
<b>Rel Job Status</b>	Rel Testing Complete Passes All Requirements

## Completed Tasks

Sub Lot #	Part	Lot	Assembly Lot	Date Code	
1	RClamp0594P	AER-006761	AER-006761	1951	
Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
1	Data-Prep	None	None	0	01-06-2020
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	0	01-08-2020
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	0	01-30-2020
4	HTRB_Pre_Elect	105	Pass on Zero Fails	0	12-20-2019
5	BI_BD_Valid	105	Meet HTOL Schematics	0	12-20-2019
6	HTRB_150°C_0072	105	Pass on Zero Fails	0	12-20-2019
7	HTRB_150°C_0408	105	Pass on Zero Fails	0	01-02-2020
8	HTS_Pre_Elect	77	Pass on Zero Fails	0	01-07-2020
9	HTS_0168	77	Pass on Zero Fails	0	01-07-2020
10	HTS_0500	77	Pass on Zero Fails	0	01-28-2020
11	HTS_1000	77	Pass on Zero Fails	0	01-28-2020
12	ROSE Clean/ Test	251	Pass on Zero Fails	0	12-20-2019
13	85°C/85%RH_N/Pre_Pre Elec	20	Pass with 0 fail	0	01-08-2020
14	85°C/85%RH_BD_Valid	20	Pass on Zero Fails	0	01-08-2020
15	85/85_120hr_On/Off	20	Pass on Zero Fails	0	01-08-2020
16	Pre_Conditioning_Level_1	NA	MSL 1	0	01-07-2020
17	Pre_Elect_Precond	231	Pass on Zero Fails	0	12-26-2019

Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
18	Precond_Temp_Cyc_5cyc	231	Pass on Zero Fails	0	12-26-2019
19	Precond_HTS_24hr	231	Pass on Zero Fails	0	12-26-2019
20	Precond_85/85_NoElec168hr	231	Pass on Zero Fails	0	01-02-2020
21	Precond_260°C_IR_Ref_Char	231	Pass on Zero Fails	0	01-02-2020
22	T/C_Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
23	T/C_wPre_0250	77	Pass on Zero Fails	0	01-03-2020
24	T/C_wPre_1000	77	Pass on Zero Fails	0	01-08-2020
25	Cross_Section TC 1000 Cyc	5	Pass on Zero Fails	0	03-19-2020
26	85°C/85%RH_W/Pre_Pre Elec	77	Pass on Zero Fails	0	01-02-2020
27	85°C/85%RH_BD_Valid	77	Pass on Zero Fails	0	01-06-2020
28	85°C/85%RH_Biased_168hrs	77	Pass on Zero Fails	0	01-06-2020
29	85°C/85%RH_Biased_500hrs	77	Pass on Zero Fails	0	01-13-2020
30	85°C/85%RH_Biased_1000hrs	77	Pass on Zero Fails	0	01-27-2020
31	Cross_Section 85°C/85%RH	5	Pass on Zero Fails	0	04-07-2020
32	HAST_Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
33	HAST_BD_Validation	N/A	Pass on Zero Fails	0	01-06-2020
34	HAST_wPRE_0100	77	Pass on Zero Fails	0	01-07-2020
35	HAST_wPRE_0200_120C	77	Pass on Zero Fails	0	01-13-2020
36	CSAM Analysis	22	Pass on Zero Fails	0	01-08-2020
37	Precond_Temp_Cyc_5cyc	22	Pass on Zero Fails	0	01-09-2020
38	Precond_HTS_24hr	22	Pass on Zero Fails	0	01-09-2020
39	Precond_85/85_NoElec168hr	22	Pass on Zero Fails	0	01-10-2020
40	Precond_260°C_IR_Ref_Char	22	Pass on Zero Fails	0	01-17-2020
41	CSAM Analysis	22	Pass on Zero Fails	0	01-20-2020

Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
42	Construct_Package	5 unique packaged devices minimum.	No Major Findings, Q&R to review construction analysis report.	0	02-19-2020
43	Pack_Clos	0	0	0	04-07-2020

Sub Lot #	Part	Lot	Assembly Lot	Date Code
2	RClamp0594P	AER-006762	AER-006762	1951

Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
1	Data-Prep	None	None	0	01-06-2020
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	0	01-08-2020
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	0	02-03-2020
4	HTRB_Pre_Elect	105	Pass on Zero Fails	0	12-20-2019
5	BI_BD_Valid	105	Meet HTOL Schematics	0	12-20-2019
6	HTRB_150°C_0072	105	Pass on Zero Fails	0	12-20-2019
7	HTRB_150°C_0408	105	Pass on Zero Fails	0	01-02-2020
8	HTS_Pre_Elect	77	Pass on Zero Fails	0	01-07-2020
9	HTS_0168	77	Pass on Zero Fails	0	01-07-2020
10	HTS_0500	77	Pass on Zero Fails	0	01-14-2020
11	HTS_1000	77	Pass on Zero Fails	0	01-28-2020
12	ROSE Clean/ Test	251	Pass on Zero Fails	0	12-20-2019
13	85°C/85%RH_N/Pre_Pre Elec	20	Pass with 0 fail	0	01-07-2020
14	85°C/85%RH_BD_Valid	20	Pass on Zero Fails	0	01-07-2020
15	85/85_120hr_On/Off	20	Pass on Zero Fails	0	01-07-2020
16	Pre_Conditioning_Level_1	NA	MSL 1	0	01-07-2020

Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
17	Pre_Elect_Precond	231	Pass on Zero Fails	0	12-26-2019
18	Precond_Temp_Cyc_5cyc	231	Pass on Zero Fails	0	12-26-2019
19	Precond_HTS_24hr	231	Pass on Zero Fails	0	12-26-2019
20	Precond_85/85_NoElec168hr	231	Pass on Zero Fails	0	12-27-2019
21	Precond_260°C_IR_Ref_Char	231	Pass on Zero Fails	0	01-02-2020
22	T/C_Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
23	T/C_wPre_0250	77	Pass on Zero Fails	0	01-03-2020
24	T/C_wPre_0500	77	Pass on Zero Fails	0	01-08-2020
25	T/C_wPre_1000	77	Pass on Zero Fails	0	01-14-2020
26	Cross_Section TC 1000 Cyc	5	Pass on Zero Fails	0	03-19-2020
27	85°C/85%RH_W/Pre_Pre Elec	77	Pass on Zero Fails	0	01-02-2020
28	85°C/85%RH_BD_Valid	77	Pass on Zero Fails	0	01-06-2020
29	85°C/85%RH_Biased_168hrs	77	Pass on Zero Fails	0	01-06-2020
30	85°C/85%RH_Biased_500hrs	77	Pass on Zero Fails	0	01-13-2020
31	85°C/85%RH_Biased_1000hrs	77	Pass on Zero Fails	0	01-27-2020
32	Cross_Section 85°C/85%RH	5	Pass on Zero Fails	0	04-07-2020
33	HAST Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
34	HAST_BD_Validation	N/A	Pass on Zero Fails	0	01-06-2020
35	HAST_wPRE_0100	77	Pass on Zero Fails	0	01-07-2020
36	HAST_wPRE_0200_120C	77	Pass on Zero Fails	0	01-14-2020
37	CSAM Analysis	22	Pass on Zero Fails	0	01-08-2020
38	Precond_Temp_Cyc_5cyc	22	Pass on Zero Fails	0	01-09-2020
39	Precond_HTS_24hr	22	Pass on Zero Fails	0	01-09-2020
40	Precond_85/85_NoElec168hr	22	Pass on Zero Fails	0	01-10-2020
41	Precond_260°C_IR_Ref_Char	22	Pass on Zero Fails	0	01-17-2020
42	CSAM Analysis	22	Pass on Zero Fails	0	01-20-2020
43	Pack_Clos	0	0	0	02-19-2020



Sub Lot #	Part	Lot	Assembly Lot	Date Code	
3	RClamp0594P	AER-006763	AER-006763	1951	
Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
1	Data-Prep	None	None	0	01-06-2020
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	0	01-08-2020
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	0	01-30-2020
4	HTRB_Pre_Elect	105	Pass on Zero Fails	0	12-20-2019
5	BI_BD_Valid	105	Meet HTOL Schematics	0	12-20-2019
6	HTRB_150°C_0072	105	Pass on Zero Fails	0	12-20-2019
7	HTRB_150°C_0408	105	Pass on Zero Fails	0	01-02-2020
8	HTS_Pre_Elect	77	Pass on Zero Fails	0	01-07-2020
9	HTS_0168	77	Pass on Zero Fails	0	01-07-2020
10	HTS_0500	77	Pass on Zero Fails	0	01-14-2020
11	HTS_1000	77	Pass on Zero Fails	0	01-28-2020
12	ROSE Clean/ Test	251	Pass on Zero Fails	0	12-20-2019
13	85°C/85%RH_N/Pre_Pre Elec	20	Pass with 0 fail	0	01-07-2020
14	85°C/85%RH_BD_Valid	20	Pass on Zero Fails	0	01-07-2020
15	85/85_120hr_On/Off	20	Pass on Zero Fails	0	01-07-2020
16	Pre_Conditioning_Level_1	NA	MSL 1	0	01-07-2020
17	Pre_Elect_Precond	231	Pass on Zero Fails	0	12-26-2019
18	Precond_Temp_Cyc_5cyc	231	Pass on Zero Fails	0	12-26-2019
19	Precond_HTS_24hr	231	Pass on Zero Fails	0	12-26-2019
20	Precond_85/85_NoElec168hr	231	Pass on Zero Fails	0	12-27-2019
21	Precond_260°C_IR_Ref_Char	231	Pass on Zero Fails	0	01-02-2020
22	T/C_Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
23	T/C_wPre_0250	77	Pass on Zero Fails	0	01-03-2020
24	T/C_wPre_0500	77	Pass on Zero Fails	0	01-08-2020
25	T/C_wPre_1000	77	Pass on Zero Fails	0	01-14-2020
26	Cross_Section TC 1000 Cyc	5	Pass on Zero Fails	0	03-19-2020
27	85°C/85%RH_W/Pre_Pre Elec	77	Pass on Zero Fails	0	01-02-2020
28	85°C/85%RH_BD_Valid	77	Pass on Zero Fails	0	01-06-2020
29	85°C/85%RH_Biased_168hrs	77	Pass on Zero Fails	0	01-06-2020

Task#	Task Code	Sample Size	Criteria	Failures	Task On Actual
30	85°C/85%RH_Biased_500hrs	77	Pass on Zero Fails	0	01-13-2020
31	85°C/85%RH_Biased_1000hrs	77	Pass on Zero Fails	0	01-27-2020
32	Cross_Section 85°C/85%RH	5	Pass on Zero Fails	0	04-07-2020
33	HAST Pre_Elect	77	Pass on Zero Fails	0	01-02-2020
34	HAST_BD_Validation	N/A	Pass on Zero Fails	0	01-06-2020
35	HAST_wPRE_0100	77	Pass on Zero Fails	0	01-07-2020
36	HAST_wPRE_0200_120C	77	Pass on Zero Fails	0	01-14-2020
37	CSAM Analysis	22	Pass on Zero Fails	0	01-08-2020
38	Precond_Temp_Cyc_5cyc	22	Pass on Zero Fails	0	01-09-2020
39	Precond_HTS_24hr	22	Pass on Zero Fails	0	01-09-2020
40	Precond_85/85_NoElec168hr	22	Pass on Zero Fails	0	01-10-2020
41	Precond_260°C_IR_Ref_Char	22	Pass on Zero Fails	0	01-17-2020
42	CSAM Analysis	22	Pass on Zero Fails	0	01-20-2020
43	Pack_Clos	JANmon20200	0	0	02-19-2020

### PROTECTION PRODUCTS

#### Description

RailClamp® TVS arrays are ultra low capacitance ESD protection devices designed to protect high speed data interfaces. This series has been specifically designed to protect sensitive components which are connected to high-speed data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).

RClamp0594P has a typical capacitance of only 0.3 pF between I/O pins. ESD characteristics are highlighted by high ESD withstand voltage ( $\pm 12\text{kV}$  per IEC 61000-4-2), each device will protect four lines operating at 5 volts.

RClamp0594P is in a DFN 2.5 x 1.0 x 0.55mm 10-Lead package. The flow-through package design simplifies PCB layout.

#### Features

- Transient Protection to
  - ♦ IEC 61000-4-2 (ESD)  $\pm 17\text{ kV}$  (Air),  $\pm 12\text{ kV}$  (Contact)
  - ♦ IEC 61000-4-4 (EFT) 40A (5/50ns)
  - ♦ IEC 61000-4-5 (Lightning) 6A (8/20 $\mu\text{s}$ )
- Protects four High-Speed Data Lines
- Package design optimized for high speed lines
- Working voltage: 5V
- Low clamping voltage
- Low capacitance: 0.3 pF typical (I/O to I/O)
- Solid-State Silicon-Avalanche Technology

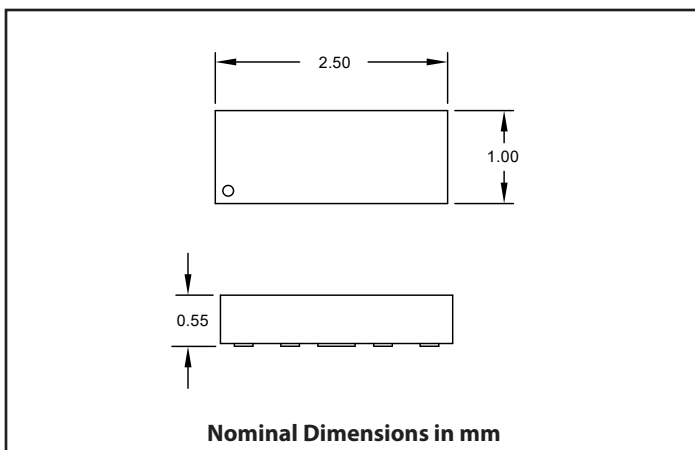
#### Mechanical Characteristics

- Package: DFN 2.5 x 1.0 x 0.55mm 10-Lead
- Pb-Free, Halogen Free, RoHS/WEEE Compliant
- Lead-free Finish
- Marking : Marking Code + Date Code
- Packaging : Tape and Reel

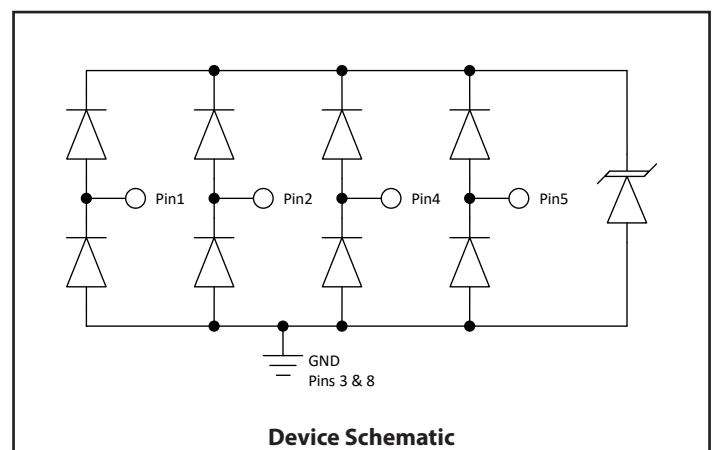
#### Applications

- HDMI 2.0
- Embedded Display Port (eDP)
- Display Port
- LVDS
- V-by-One

#### Nominal Dimension



#### Functional Schematic



## Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Current (tp = 8/20μs)	I <sub>PP</sub>	6	A
ESD per IEC 61000-4-2 (Contact) <sup>(1)</sup> ESD per IEC 61000-4-2 (Air) <sup>(1)</sup>	V <sub>ESD</sub>	±12 ±17	kV
Operating Temperature	T <sub>OP</sub>	-55 to +125	°C
Junction Temperature and Storage Temperature	T <sub>J</sub> & T <sub>STG</sub>	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	Any I/O pin to GND			5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>t</sub> = 1mA, Any I/O pin to GND	6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V			0.1	μA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> = 1A, tp = 8/20μs, Any I/O pin to GND			15	V
ESD Clamping Voltage <sup>(2)</sup>	V <sub>C</sub>	I <sub>PP</sub> = 4A, tp = 0.2/100ns (TLP) Any I/O pin to GND		10.8		V
		I <sub>PP</sub> = 16A, tp = 0.2/100ns (TLP) Any I/O pin to GND		13.0		
Dynamic Resistance <sup>(2)(3)</sup>	R <sub>DYN</sub>	tp = 0.2/100ns (TLP)		0.19		Ohms
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1MHz Any I/O pin to GND			0.8	pF
		V <sub>R</sub> = 0V, f = 1MHz Between I/O pins		0.30	0.40	

Notes:

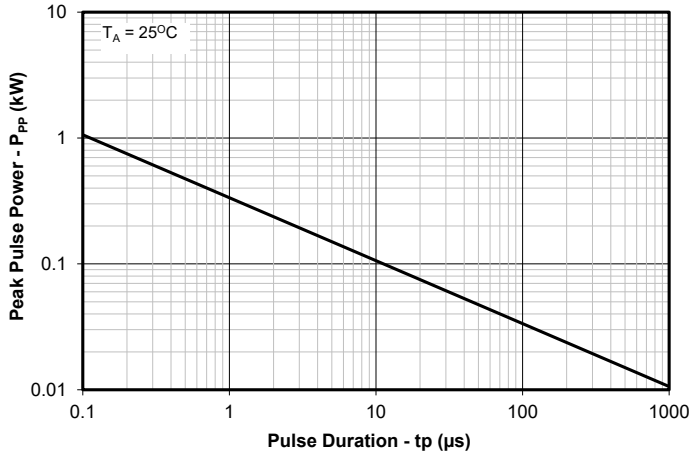
(1) ESD gun return path connected to Ground Reference Plane (GRP)

(2) Transmission Line Pulse Test (TLP) Settings: tp = 100ns, tr = 0.2ns, ITLP and VTLP averaging window: t1 = 70ns to t2 = 90ns.

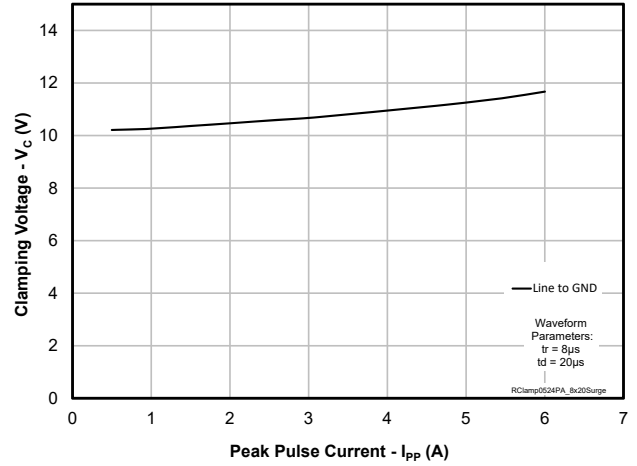
(3) Dynamic resistance calculated from I<sub>TLP</sub> = 4A to I<sub>TLP</sub> = 16A

# Typical Characteristics

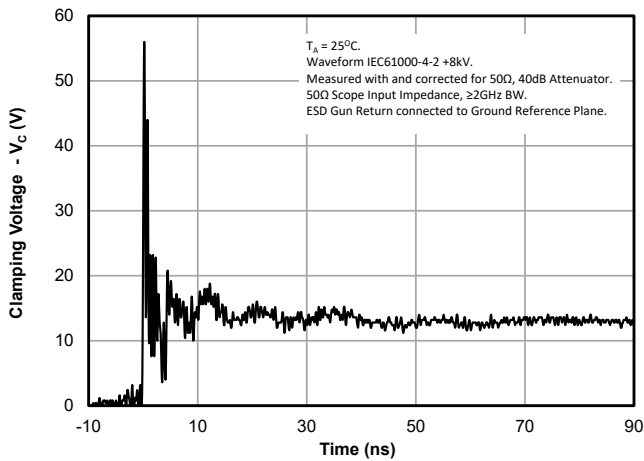
### Non-Repetitive Peak Pulse Power vs. Pulse Time



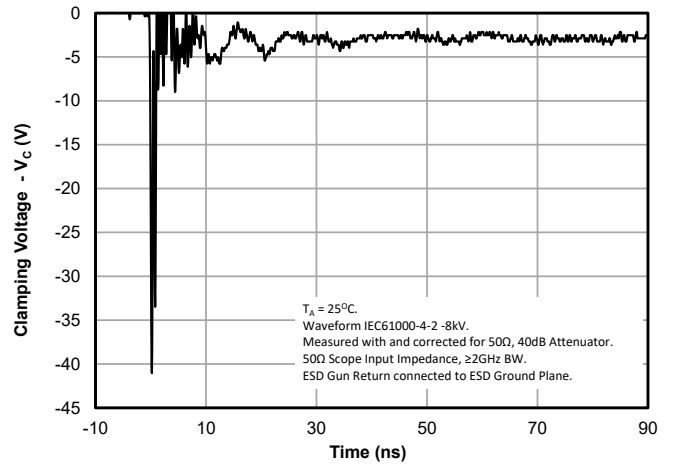
### 8/20μs Surge Clamping Characteristic



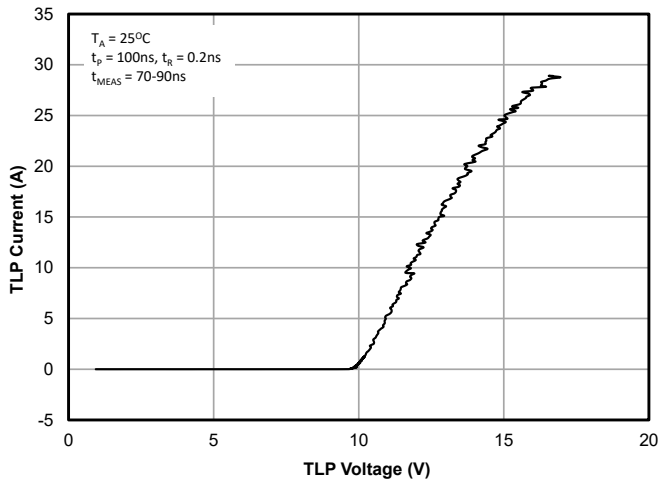
### ESD Clamping (+8kV Contact per IEC 61000-4-2)



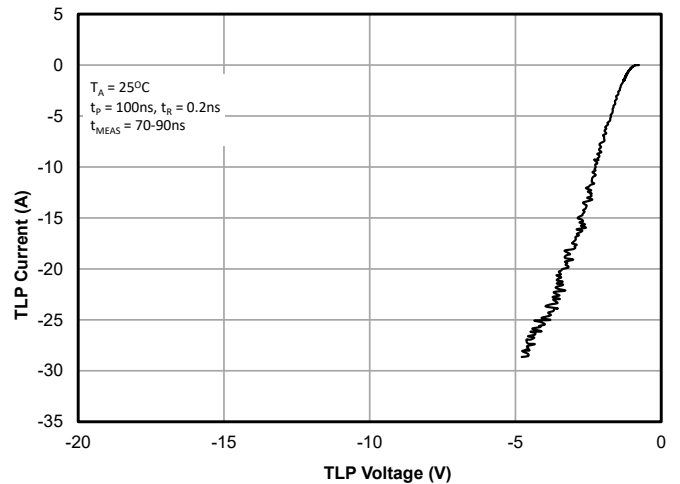
### ESD Clamping (-8kV Contact per IEC 61000-4-2)



### TLP Characteristic (Positive Pulse)

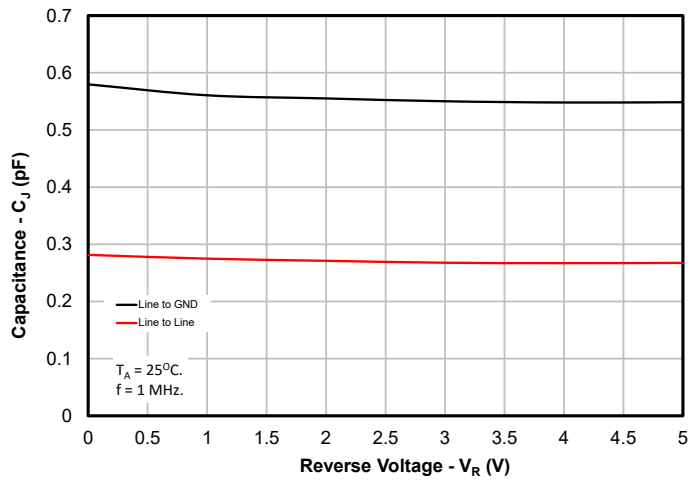


### TLP Characteristic (Negative Pulse)

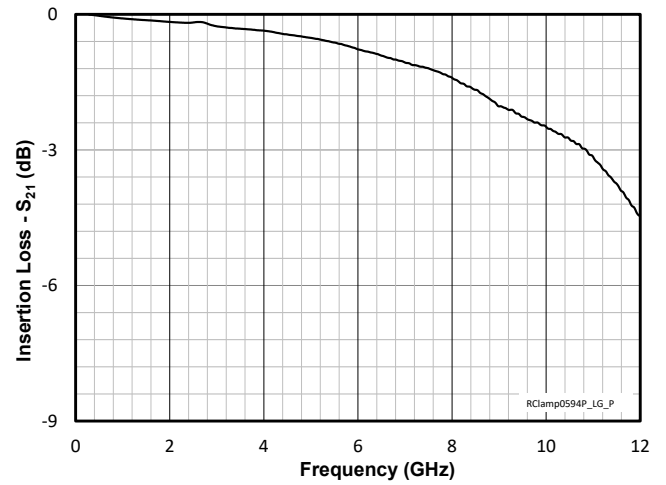


# Typical Characteristics

### Capacitance vs. Reverse Voltage



### Insertion Loss (Line to GND)



# Applications Information

## Assembly Guidelines

The figure at the right details Semtech’s recommended mounting pattern. Recommended assembly guidelines are shown in Table 2. Note that these are only recommendations and should serve only as a starting point for design since there are many factors that affect the assembly process. Exact manufacturing parameters will require some experimentation to get the desired solder application. Semtech’s recommended mounting pattern is based on the following design guidelines:

## Land Pattern

The recommended land pattern follows IPC standards and is designed for maximum solder coverage. Detailed dimensions are shown elsewhere in this document.

## Solder Stencil

Stencil design is one of the key factors which will determine the volume of solder paste which is deposited onto the land pad. The area ratio of the stencil aperture will determine how well the stencil will print. The area ratio takes into account the aperture shape, aperture size, and stencil thickness. The area ratio of a rectangular aperture is given as:

$$\text{Area Ratio} = (L * W) / (2 * (L + W) * T)$$

Where:

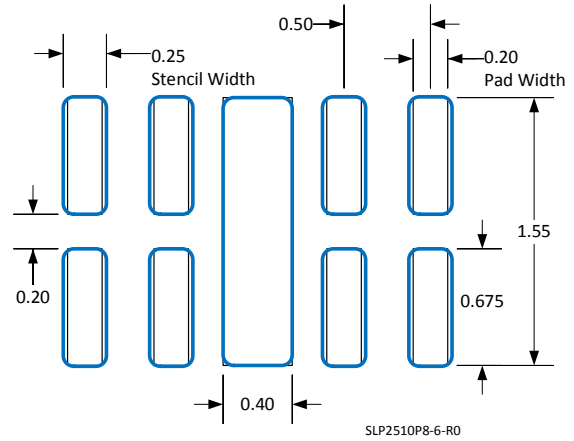
L = Aperture Length

W = Aperture Width

T = Stencil Thickness

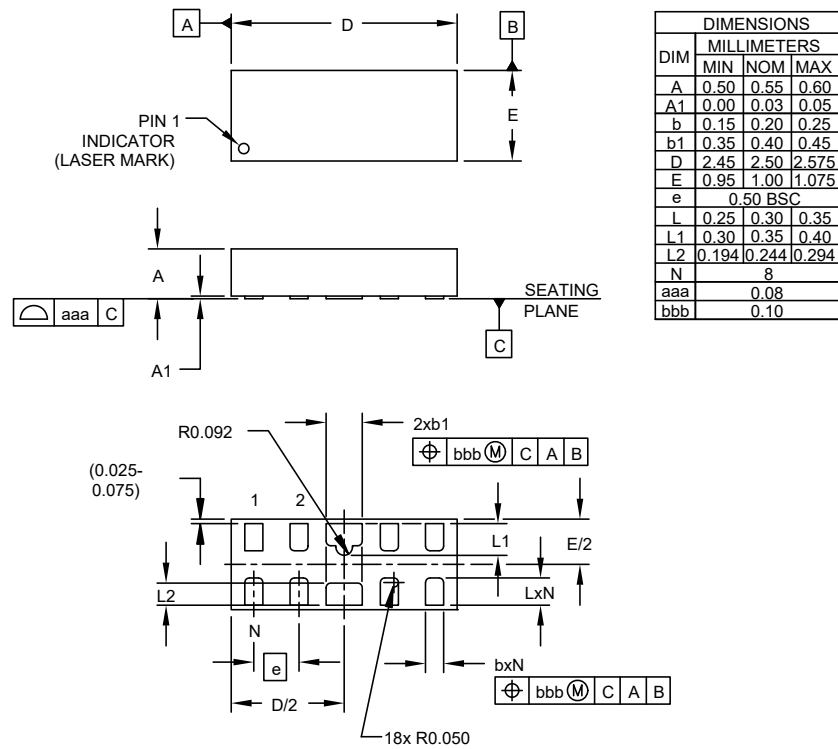
Semtech recommends a stencil thickness of 0.100mm - 0.125mm for this device. The stencil should be laser cut with electro-polished finish. The stencil should have a positive taper of approximately 5 degrees. Electro polishing and tapering the walls results in reduced surface friction and better paste release. Due to the small aperture size, a solder paste with Type 4 or smaller particles is recommended. Assuming a 125um thick stencil, the aperture dimensions shown will yield an area ratio of 0.72 for the small pads and 1.25 for the large.

## Recommended Stencil Design



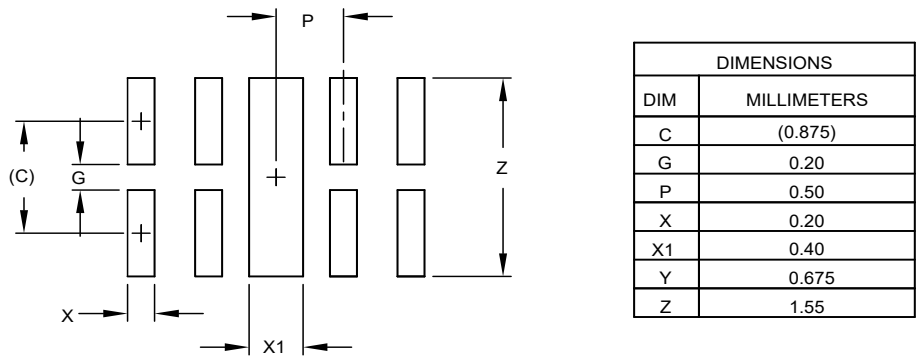
Assembly Parameter	Recommendation
Solder Stencil Design	Laser Cut, Electro-Polished
Aperture Shape	Rectangular
Solder Stencil Thickness	0.100mm (0.004") - 0.125mm (0.005")
Solder Paste Type	Type 4 size sphere or smaller
Solder Reflow Profile	Per JEDEC J-STD-020
PCB Solder pad Design	Non-Solder Mask Defined
PCB Pad Finish	OSP or NiAu

# Outline Drawing - DFN 2.5 x 1.0 x 0.55mm 10-Lead



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

# Land Pattern - DFN 2.5 x 1.0 x 0.55mm 10-Lead



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.







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